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## **Quarterly Progress Report January through March 2001**

Jervis B. Webb Company of California  
5030 Firestone Boulevard  
South Gate, California

30 April 2001

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**Erler &  
Kalinowski, Inc.**

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***Quarterly Progress Report: January through March 2001***  
**Jervis B. Webb Company of California**  
**5030 Firestone Boulevard, South Gate, California**

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## **1. INTRODUCTION**

Erler & Kalinowski, Inc. ("EKI") is pleased to present this *Quarterly Progress Report, January through March 2001* for the property located at 5030 Firestone Boulevard and 9301 Rayo Avenue in South Gate, California (collectively referred to as the "Site," see Figure 1). The work documented in this report was performed on behalf of the Jervis B. Webb Company of California ("Webb"). The property at 5030 Firestone Boulevard is owned by Webb and the adjacent property at 9301 Rayo Avenue is owned by Reliable Steel Building Products, Inc. ("Reliable Steel").

The principal objectives of the activities performed during this quarter were to (1) monitor the groundwater wells at the Site, and (2) continue operation of the soil vapor extraction ("SVE") system at the Site. The quarterly groundwater monitoring activities described herein were performed in accordance with the procedures described in *Project Tasks, Schedule, and Work Plan for Additional Groundwater Investigation and Quarterly Groundwater Monitoring at the Jervis B. Webb Company Property* by EKI, dated 29 September 1998. The SVE activities described herein were performed in accordance with the *Work Plan for Clarifier Removal and Soil Remediation by Soil Vapor Extraction* by EKI, dated 14 April 1999 ("SVE Work Plan"). The California Regional Water Quality Control Board, Los Angeles Region ("RWQCB") approved the SVE Work Plan, with two modifications, in its letter to Webb dated 18 May 1999.

## **2. QUARTERLY GROUNDWATER MONITORING**

### **2.1. Measurements of Groundwater Elevation**

The depth to groundwater in each of the five groundwater monitoring wells at the Site was measured on 4 January, 22 February, and 8 March 2001 (see Figure 2 for well locations). These data are provided in Table 1. The depth to the groundwater table beneath the Site is approximately 45 feet below ground surface ("ft bgs"). Contours representing the elevation of the groundwater table on 4 January, 22 February, and 8 March 2001 are shown on Figures 3, 4, and 5, respectively. As inferred from the contours shown on these figures, the primary direction of groundwater flow in the groundwater table aquifer beneath the Site appears to be toward the south-southeast.

### **2.2. Groundwater Sampling**

Samples of groundwater were collected from each of the five groundwater monitoring wells at the Site on 8 March 2001. In addition, a duplicate sample of groundwater was collected from well MW-2. All samples of groundwater were submitted to Orange Coast Analytical, Inc. in Tustin, California, for analyses of volatile organic compounds ("VOCs") using United States Environmental Protection Agency ("EPA") Method 8260B, total arsenic using EPA Method 206.2, and California Code of Regulations ("CCR") metals, including hexavalent chromium, using EPA Methods 200.7, 218.4, and 245.1. The analytical results for VOCs and metals detected in groundwater samples collected during this monitoring event are summarized in Tables 2 and 3, respectively.

#### **2.2.1. Groundwater Sampling Procedures**

Prior to sampling of groundwater, each well was purged of a minimum of three well-casing volumes of groundwater using a submersible, electric pump. Groundwater purging was performed by West Hazmat Drilling Corp. ("West Hazmat") of Anaheim, California and groundwater samples were collected by Drewelow Engineering, Inc. ("Drewelow") of Encinitas, California. All down-hole equipment was thoroughly steam cleaned before use at each well.

During purging of the monitoring wells on 8 March 2001, the temperature, pH, conductivity, and turbidity of the purged groundwater were recorded by Drewelow. The instruments used for monitoring the purged groundwater were calibrated prior to commencement of groundwater purging. For each groundwater monitoring well, the time, water quality parameters, and volume of purged groundwater were recorded on forms in the field (see Appendix A). Purging at each well continued until the variability of the monitored groundwater quality parameters stabilized to within approximately ten percent. Groundwater

quality parameters were generally stable after purging three casing volumes of water from each well. The final turbidity of the purged groundwater was generally low, i.e., between 0.76 and 3.75 nephelometric turbidity units (see Appendix A).

A groundwater sample was collected from each monitoring well using a disposable polyethylene bailer. A new bailer was used to collect the sample from each well. A sample label that included a unique sample identification number, the time, and the date when the sample was collected was attached to each sample container. Sample containers were sealed in zip-lock plastic bags and placed in a cooler with ice for temporary storage and transport to the analytical laboratory. Chain-of-Custody forms were initiated in the field and stored with the samples. Laboratory reports and Chain-of-Custody forms for groundwater samples are attached in Appendix B.

## 2.2.2. Analytical Results for Groundwater Samples

### 2.2.2.1. Volatile Organic Compounds

Trichloroethene ("TCE"), cis-1,2-dichloroethene ("c-1,2-DCE"), 1,1-dichloroethene ("1,1-DCE"), and toluene were the only VOCs detected in the samples of groundwater collected at the Site on 8 March 2001 (see Table 2). The concentrations of TCE detected in the samples of groundwater collected at the Site are shown on Figure 6. Consistent with previous results, TCE was the chemical of concern detected with the greatest frequency (five of six samples) and at the highest concentration (23,000 micrograms per liter ("ug/L") in well MW-1). The concentrations of TCE (<0.5 to 23,000 ug/L), c-1,2-DCE (<0.5 to 260 ug/L), and 1,1-DCE (<0.5 ug/L to 55 ug/L) detected in samples of the groundwater collected at the Site during March 2001 were within the ranges of concentrations detected during previous monitoring at the Site (see Table 2). The only detection of toluene, at a concentration of 140 ug/L, was in the sample of groundwater collected from well MW-5. No VOCs were detected in the sample of groundwater collected from downgradient monitoring well MW-4.

### 2.2.2.2. Metals

As requested by the RWQCB in its meeting with Webb on 8 February 2001, the samples of groundwater collected at the Site during March 2001 were analyzed for CCR metals. Arsenic (5.6 to 320 ug/L), barium (19 to 150 ug/L), molybdenum (<50 to 1,100 ug/L), and zinc (12 to 25 ug/L) were the only metals detected in the samples of groundwater collected at the Site on 8 March 2001 (see Table 3).

## 2.2.3. Quality Assurance/Quality Control

Standard laboratory QA/QC procedures used for the project included analyses of matrix spikes, matrix spike duplicates, a quality control check spike sample, and a method blank. The percent recoveries of the matrix spike, matrix spike duplicate, and the quality control check spike sample were within acceptable ranges. No analytes were detected in the method

blank samples analyzed for this project. QA/QC results are provided with the laboratory reports in Appendix B.

A duplicate groundwater sample was collected from monitoring well MW-2 (see Tables 2 and 3). Two VOCs (TCE and c-1,2-DCE) and four metals (total arsenic, barium, molybdenum, and zinc) were detected in both of the samples of groundwater collected from well MW-2. The relative percentage differences ("RPDs") for these analytes ranged between zero and 16 percent. These RPDs indicate an acceptable range of sampling and analytical reproducibility.

An equipment rinsate blank also was collected and analyzed during the groundwater sampling event on 8 March 2001. Following the sampling of well MW-3 and steam cleaning of the purge pump, the equipment rinsate blank was collected by pouring water over the pump into sample containers. The rinse water was provided by West Hazmat from an offsite source. A sample of the rinse water also was submitted to the analytical laboratory for analysis. The equipment rinsate blank and the sample of rinse water were analyzed for VOCs using EPA Method 8260B.

Several VOCs were detected in both the equipment rinsate blank and the sample of rinse water. TCE (120 ug/L), c-1,2-DCE (5.4 ug/L), and bromoform (2.3 ug/L) were detected in the equipment rinsate blank, and TCE (0.7 ug/L), bromoform (2.9 ug/L), and chlorodibromomethane (1.2 ug/L) were detected in the sample of rinse water. Bromoform and chlorodibromomethane were not detected in any of the samples of groundwater collected from the monitoring wells at the Site. The concentrations of TCE and c-1,2-DCE detected in the equipment rinsate blank were more than 90 percent lower than the concentrations detected in the sample of groundwater collected from well MW-3. As none of the chemicals detected in the equipment rinsate blank were detected at concentrations more than one-tenth of those detected in the sample of groundwater collected from the well purged prior to the decontamination activities, it does not appear that the rinse water quality or equipment cleaning procedures significantly compromised the integrity of the groundwater samples.

### **3. SOIL REMEDIATION**

#### **3.1. Description of the Soil Vapor Extraction System**

##### 3.1.1. Soil Vapor Wells

Four soil vapor extraction wells and four soil vapor monitoring probes were installed at the Site during June 1999 (see Figure 7). The wells and probes were designed to allow for vapor extraction and monitoring in both the shallow and deep vadose zones at the Site. All of the wells were constructed using Schedule 40 PVC casing and screen. More detailed descriptions of well construction and subsurface conditions at the Site are contained in reports previously provided to the RWQCB (see EKI, 14 April 1999; EKI, 13 October 1999).

On 29 June 2000, two of the soil vapor monitoring probes (VMP-D1 and VMP-D2) were converted to extraction wells by connecting the probes to the soil vapor extraction system at the Site with two-inch diameter PVC pipe. These wells have been used as extraction wells during system operation since 6 July 2000. On 8 March 2001, vapor monitoring probe VMP-1 was converted to an extraction well by connecting the probe to the soil vapor extraction system at the Site with a two-inch diameter hose. This well has been used as an extraction well during system operation since 8 March 2001.

Soil Vapor Extraction Wells: The four shallow vadose zone SVE wells (see locations SVE-1, SVE-2, SVE-3, and VMP-1 on Figure 7) are constructed with two-inch diameter PVC casing. Wells SVE-1, SVE-3, and VMP-1 have slotted screen from approximately 19 to 25 ft bgs, and have total depths of approximately 25 ft bgs. Well SVE-2 has slotted screen from approximately 18 to 24 ft bgs, and has a total depth of approximately 24 ft bgs.

The three deep vadose zone SVE wells are wells SVE-D1, VMP-D1, and VMP-D2. Well SVE-D1 is constructed with four-inch diameter PVC casing with slotted screen from approximately 30 to 40 ft bgs, and has a total depth of approximately 44 ft bgs. Deep vadose zone SVE wells VMP-D1 and VMP-D2 are constructed in the same boreholes with shallow vadose zone SVE wells SVE-2 and SVE-3, respectively, and are constructed with 2-inch diameter PVC casing. Well VMP-D1 has slotted screen from approximately 30 to 40 ft bgs, and has a total depth of approximately 43 ft bgs. Well VMP-D2 has slotted screen from approximately 31 to 41 ft bgs, and has a total depth of approximately 44 ft bgs.

Soil Vapor Monitoring Probes: The shallow vadose zone vapor monitoring probe (see location VMP-2 on Figure 7) is constructed with two-inch diameter PVC casing with slotted screen from approximately 19 to 25 ft bgs, and has a total depth of approximately 25 ft bgs.

### 3.1.2. Soil Vapor Extraction and Treatment System

Installation of the SVE system was completed at the Site during March 2000. Soil vapors from the extraction wells are passed through a condensate knock-out vessel and through a 200 cubic feet per minute ("cfm") blower (see Figure 8). The soil vapors are then passed through a heat exchanger and two 1,000-pound granular activated carbon ("GAC") vessels in series, with the treated vapors exhausted to the atmosphere under permit of the South Coast Air Quality Management District ("SCAQMD"). Valves on piping from each well and an ambient air inlet valve located ahead of the knockout vessel allow regulation of air extracted from the wells. PVC pipe and fittings are used throughout the system. Electrical power to the system is metered, and the system is enclosed in a fenced area.

Vacuum gauges, a hand-held flow meter, and sampling ports are used to monitor each of the vapor extraction wells. Vacuum is measured in inches of water column ("in-wc"), vapor flow rate is measured in actual cubic feet per minute ("acfm"), and concentrations of VOCs are measured in parts per million by volume ("ppmv"). Sampling ports were installed at each of the vapor wells and probes and several locations in the SVE system for monitoring of VOC concentrations.

## **3.2. Operation and Monitoring of the SVE System**

### 3.2.1. System Operation

The SVE system began operating on 16 March 2000. Throughout this reporting period (i.e., January through March 2001), wells SVE-1, SVE-2, SVE-3, SVE-D1, VMP-D1, and VMP-D2 were used as vapor extraction wells. Well VMP-1 has been used as an extraction well since 8 March 2001. Operation and maintenance of the SVE system is performed by Drewelow.

The SVE system was shut down on 4 January 2001 following a static vapor sampling event (see EKI, 5 February 2001). The system was restarted on 19 February 2001 and was in operation through the remainder of the reporting period.

### 3.2.2. System Monitoring

The following parameters have been monitored during operation of the SVE system: vapor flow rate from the extraction wells; total vapor flow rate; vacuum (pressure) at the extraction wells and monitoring points; blower influent flow rate and vacuum; blower discharge flow rate, pressure, and temperature; and VOC concentrations in the extracted soil vapor. The water level in the knockout tank is also monitored. No water had been observed in the knockout tank prior to a system shutdown on 21 June 2000. However, during this reporting period, water was observed in the piping of extraction well SVE-2 and the inlet manifold to the system blower. Approximately 200 gallons of water were removed from the SVE system

during this reporting period. The water is stored in 55-gallon drums and transported offsite for disposal and/or treatment.

Monitoring data collected at the inlet to the system blower prior to dilution with ambient air are presented in Table 4a and Figure 9a. Monitoring data collected at individual soil vapor extraction wells are presented in Tables 4b through 4h and Figures 9b through 9h. Field monitoring data for the soil vapor monitoring probes are presented in Table 5.

On 29 March 2001, flow rates in the four shallow zone extraction wells (SVE-1, SVE-2, SVE-3, and VMP-1) ranged from 2.3 to 2.7 acfm. The flow rates in the three deep zone extraction wells (SVE-D1, VMP-D1, and VMP-D2) ranged from 19 to 21 acfm at the end of the reporting period.

### 3.2.3. Soil Vapor Field Monitoring

Total VOC concentrations in soil vapor samples were also periodically monitored with an organic vapor meter, which utilizes a photoionization detector ("PID") to measure total concentrations of VOCs. The PID does not distinguish between individual compounds, but measures the total concentration of VOCs in samples of vapor. Samples of soil vapor were collected in Tedlar bags for the PID analyses. The PID was calibrated with 100 ppmv of isobutylene. PID readings from soil vapor samples collected at the system blower, the extraction wells, and the vapor monitoring probes are presented in Tables 4a through 4h and in Table 5. These data are plotted as a function of time on Figures 9a through 9h. The PID readings suggest that total VOC concentrations in the blower influent and each of the vapor wells decreased during this reporting period.

### 3.2.4. Estimated Removal of VOCs

As no samples of soil vapor were collected for laboratory analysis during this reporting period, no estimates of VOC mass removal by the SVE system have been attempted for this reporting period. Based on measurements made at the blower influent and laboratory analytical data, it was estimated that a total of 133 pounds of VOCs, including 108 pounds of TCE, had been extracted from soil at the Site as of 14 December 2000 (see Table 4a and EKI, 5 February 2001). Given that the PID readings for vapor samples collected from the SVE system during this reporting period were generally lower than previous measurements, it appears likely that less than 10 pounds of VOCs were extracted from soil at the Site during this reporting period (see Table 4a).

### 3.2.5. SCAQMD Compliance Monitoring

During this reporting period, the effluent of the treatment system was monitored with a PID on a weekly basis to demonstrate conformance with the limitations of the SCAQMD permit for the system. For treatment system monitoring, the PID was calibrated with 50 ppmv of hexane.



The vapor treatment components of the SVE system at the Site are owned by Drewelow, and the SCAQMD permit is held by Drewelow. Drewelow reports that effluent concentrations measured by the PID have been within the discharge limitations of the SCAQMD permit throughout the operation of the SVE system.

#### **4. PLANNED ACTIVITIES FOR NEXT QUARTER**

During the next quarter, the depth to groundwater in the monitoring wells at the Site will continue to be measured on a monthly basis. Samples of groundwater will be collected from each of the groundwater monitoring wells at the Site during June 2001. These samples will be analyzed for VOCs using EPA Method 8260B and for CCR Metals using EPA Methods 206.2, 200.7, 218.4, and 245.1.

Webb will continue to operate the SVE system at the Site during the next quarter. Flow rates, vacuum, and PID readings will be monitored at the extraction wells on a weekly basis during operation of the SVE system.

## **5. SUMMARY**

Gauging of the depth to the groundwater table was performed at the groundwater monitoring wells at the Site on 4 January, 22 February, and 8 March 2001. On the basis of these measurements, the predominant direction of groundwater flow appears to be toward the south-southeast under both the Webb and Reliable Steel properties. This estimated direction of groundwater flow is consistent with previous groundwater monitoring at the Site.

The only VOCs detected in the samples of groundwater collected at the Site on 8 March 2001 were TCE, c-1,2-DCE, 1,1-DCE, and toluene. Consistent with previous results, TCE was the chemical of concern detected with the greatest frequency (five of six samples) and at the highest concentration (23,000 ug/L in well MW-1). The concentrations of TCE, c-1,2-DCE, and 1,1-DCE detected in samples of the groundwater collected at the Site during March 2000 were within the ranges of concentrations detected during previous monitoring at the Site. The only detection of toluene (140 ug/L) was in the sample of groundwater collected from well MW-5. No VOCs were detected in the sample of groundwater collected from downgradient monitoring well MW-4.

As requested by the RWQCB in its meeting with Webb on 8 February 2001, the samples of groundwater collected at the Site during March 2001 were analyzed for CCR metals. Arsenic (5.6 to 320 ug/L), barium (19 to 150 ug/L), molybdenum (<50 to 1,100 ug/L), and zinc (12 to 25 ug/L) were the only metals detected in the samples of groundwater collected at the Site on 8 March 2001 (see Table 3). No other metals, including chromium, were detected in the samples of groundwater collected from the monitoring wells at the Site.

The SVE system at the Site has operated continuously since the restart of the system on 19 February 2001. PID readings from soil vapor samples collected at the extraction wells and vapor monitoring probes suggest that total VOC concentrations in the blower influent and each of the vapor wells decreased during this reporting period.

## **6. REFERENCES AND PREVIOUS REPORTS**

Erler & Kalinowski, Inc., 5 February 2001. *Quarterly Progress Report for October through December 2000 for the Jervis B. Webb Company of California Property, 5030 Firestone Boulevard, South Gate, California.*

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Erler & Kalinowski, Inc., 30 June 1998. *Phase II Groundwater Investigation Report at 5030 Firestone Boulevard in South Gate, California.*

Erler & Kalinowski, Inc., 18 February 1998. *Phase II Soil Investigation Report for the Jervis B. Webb Company Property at 5030 Firestone Boulevard in South Gate, California.*

Erler & Kalinowski, Inc., 20 June 1996. *Phase I Environmental Site Assessment of the Jervis B. Webb Properties at 9301 Rayo Avenue and 5030 Firestone Boulevard in South Gate, California.*

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Date     | Elevation of<br>Top-of-Casing<br>(ft msl) | Depth to<br>Water<br>(ft bgs) | Elevation of<br>Water Surface<br>(ft msl) | Comments |
|---------|----------|---|-------------------------------|---|----------|
| MW-1    | 2/27/98  | 106.09                                    | 44.79                         | 61.30                                     |          |
|         | 3/2/98   | 106.09                                    | 44.82                         | 61.27                                     |          |
|         | 3/4/98   | 106.09                                    | 44.58                         | 61.51                                     |          |
|         | 4/8/98   | 106.09                                    | 44.57                         | 61.52                                     |          |
|         | 5/20/98  | 106.09                                    | 43.99                         | 62.10                                     |          |
|         | 10/8/98  | 106.09                                    | 43.38                         | 62.71                                     |          |
|         | 11/5/98  | 106.09                                    | 43.14                         | 62.95                                     |          |
|         | 12/21/98 | 106.09                                    | 43.37                         | 62.72                                     |          |
|         | 1/19/99  | 106.09                                    | 43.26                         | 62.83                                     |          |
|         | 2/3/99   | 106.09                                    | 42.98                         | 63.11                                     |          |
|         | 3/30/99  | 106.09                                    | 43.22                         | 62.87                                     |          |
|         | 6/1/99   | 106.09                                    | 43.48                         | 62.61                                     |          |
|         | 7/29/99  | 106.09                                    | 43.82                         | 62.27                                     |          |
|         | 9/1/99   | 106.09                                    | 43.76                         | 62.33                                     |          |
|         | 9/23/99  | 106.09                                    | 44.03                         | 62.06                                     |          |
|         | 10/18/99 | 106.09                                    | 44.43                         | 61.66                                     |          |
|         | 12/8/99  | 106.09                                    | 44.55                         | 61.54                                     |          |
|         | 1/27/00  | 106.09                                    | 44.40                         | 61.69                                     |          |
|         | 2/28/00  | 106.09                                    | 44.34                         | 61.75                                     |          |
|         | 3/15/00  | 106.09                                    | 44.06                         | 62.03                                     |          |
|         | 4/13/00  | 106.09                                    | 44.73                         | 61.36                                     |          |
|         | 5/18/00  | 106.09                                    | 44.58                         | 61.51                                     |          |
|         | 6/20/00  | 106.09                                    | 44.60                         | 61.49                                     |          |
|         | 7/13/00  | 106.09                                    | 45.17                         | 60.92                                     |          |
|         | 8/17/00  | 106.09                                    | 45.30                         | 60.79                                     |          |
|         | 9/7/00   | 106.09                                    | 45.15                         | 60.94                                     |          |
|         | 10/26/00 | 106.09                                    | 45.87                         | 60.22                                     |          |
|         | 11/21/00 | 106.09                                    | 45.60                         | 60.49                                     |          |
|         | 12/5/00  | 106.09                                    | 45.72                         | 60.37                                     |          |
|         | 1/4/01   | 106.09                                    | 45.67                         | 60.42                                     |          |
|         | 2/22/01  | 106.09                                    | 45.43                         | 60.66                                     |          |
|         | 3/8/01   | 106.09                                    | 45.09                         | 61.00                                     |          |

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Date     | Elevation of<br>Top-of-Casing<br>(ft msl) | Depth to<br>Water<br>(ft bgs) | Elevation of<br>Water Surface<br>(ft msl) | Comments              |
|---------|----------|---|-------------------------------|---|-----------------------|
| MW-2    | 2/27/98  | 106.65                                    | 44.02                         | 62.63                                     | Truck parked on well. |
|         | 3/2/98   | 106.65                                    | 44.06                         | 62.59                                     |                       |
|         | 3/4/98   | 106.65                                    | 44.13                         | 62.52                                     |                       |
|         | 4/8/98   | 106.65                                    | NR                            | --  |                       |
|         | 5/20/98  | 106.65                                    | 43.51                         | 63.14                                     |                       |
|         | 10/8/98  | 106.65                                    | 42.84                         | 63.81                                     |                       |
|         | 11/5/98  | 106.65                                    | 42.64                         | 64.01                                     |                       |
|         | 12/21/98 | 106.65                                    | 42.69                         | 63.96                                     |                       |
|         | 1/19/99  | 106.65                                    | 42.66                         | 63.99                                     |                       |
|         | 2/3/99   | 106.65                                    | 42.55                         | 64.10                                     |                       |
|         | 3/30/99  | 106.65                                    | 42.63                         | 64.02                                     |                       |
|         | 6/1/99   | 106.65                                    | 42.91                         | 63.74                                     |                       |
|         | 7/29/99  | 106.65                                    | 43.13                         | 63.52                                     |                       |
|         | 9/1/99   | 106.65                                    | 43.14                         | 63.51                                     |                       |
|         | 9/23/99  | 106.65                                    | 43.35                         | 63.30                                     |                       |
|         | 10/18/99 | 106.65                                    | 43.60                         | 63.05                                     |                       |
|         | 12/8/99  | 106.65                                    | 43.62                         | 63.03                                     |                       |
|         | 1/27/00  | 106.65                                    | 43.86                         | 62.79                                     |                       |
|         | 2/28/00  | 106.65                                    | 43.86                         | 62.79                                     |                       |
|         | 3/15/00  | 106.65                                    | 43.62                         | 63.03                                     |                       |
|         | 4/13/00  | 106.65                                    | 43.92                         | 62.73                                     |                       |
|         | 5/18/00  | 106.65                                    | 43.50                         | 63.15                                     |                       |
|         | 6/20/00  | 106.65                                    | 43.48                         | 63.17                                     |                       |
|         | 7/13/00  | 106.65                                    | 43.29                         | 63.36                                     |                       |
|         | 8/17/00  | 106.65                                    | 43.38                         | 63.27                                     |                       |
|         | 9/7/00   | 106.65                                    | 44.30                         | 62.35                                     |                       |
|         | 10/26/00 | 106.65                                    | 44.74                         | 61.91                                     |                       |
|         | 11/21/00 | 106.65                                    | 44.52                         | 62.13                                     |                       |
|         | 12/5/00  | 106.65                                    | 44.51                         | 62.14                                     |                       |
|         | 1/4/01   | 106.65                                    | 44.55                         | 62.10                                     |                       |
|         | 2/22/01  | 106.65                                    | 43.91                         | 62.74                                     |                       |
|         | 3/8/01   | 106.65                                    | 43.25                         | 63.40                                     |                       |

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Date     | Elevation of<br>Top-of-Casing<br>(ft msl) | Depth to<br>Water<br>(ft bgs) | Elevation of<br>Water Surface<br>(ft msl) | Comments |
|---------|----------|---|-------------------------------|---|----------|
| MW-3    | 2/27/98  | 105.87                                    | 44.55                         | 61.32                                     |          |
|         | 3/2/98   | 105.87                                    | 44.56                         | 61.31                                     |          |
|         | 3/4/98   | 105.87                                    | 44.40                         | 61.47                                     |          |
|         | 4/8/98   | 105.87                                    | 44.39                         | 61.48                                     |          |
|         | 5/20/98  | 105.87                                    | 43.80                         | 62.07                                     |          |
|         | 10/8/98  | 105.87                                    | 43.26                         | 62.61                                     |          |
|         | 11/5/98  | 105.87                                    | 43.60                         | 62.27                                     |          |
|         | 12/21/98 | 105.87                                    | 43.33                         | 62.54                                     |          |
|         | 1/19/99  | 105.87                                    | 43.18                         | 62.69                                     |          |
|         | 2/3/99   | 105.87                                    | 42.97                         | 62.90                                     |          |
|         | 3/30/99  | 105.87                                    | 43.19                         | 62.68                                     |          |
|         | 6/1/99   | 105.87                                    | 43.58                         | 62.29                                     |          |
|         | 7/29/99  | 105.87                                    | 43.85                         | 62.02                                     |          |
|         | 9/1/99   | 105.87                                    | 43.90                         | 61.97                                     |          |
|         | 9/23/99  | 105.87                                    | 44.10                         | 61.77                                     |          |
|         | 10/18/99 | 105.87                                    | 44.37                         | 61.50                                     |          |
|         | 12/8/99  | 105.87                                    | 44.64                         | 61.23                                     |          |
|         | 1/27/00  | 105.87                                    | 44.69                         | 61.18                                     |          |
|         | 2/28/00  | 105.87                                    | 44.75                         | 61.12                                     |          |
|         | 3/15/00  | 105.87                                    | 44.41                         | 61.46                                     |          |
|         | 4/13/00  | 105.87                                    | 44.86                         | 61.01                                     |          |
|         | 5/18/00  | 105.87                                    | 44.94                         | 60.93                                     |          |
|         | 6/20/00  | 105.87                                    | 44.88                         | 60.99                                     |          |
|         | 7/13/00  | 105.87                                    | 45.25                         | 60.62                                     |          |
|         | 8/17/00  | 105.87                                    | 45.06                         | 60.81                                     |          |
|         | 9/7/00   | 105.87                                    | 44.83                         | 61.04                                     |          |
|         | 10/26/00 | 105.87                                    | 45.94                         | 59.93                                     |          |
|         | 11/21/00 | 105.87                                    | 46.00                         | 59.87                                     |          |
|         | 12/5/00  | 105.87                                    | 45.77                         | 60.10                                     |          |
|         | 1/4/01   | 105.87                                    | 45.89                         | 59.98                                     |          |
|         | 2/22/01  | 105.87                                    | 45.53                         | 60.34                                     |          |
|         | 3/8/01   | 105.87                                    | 45.21                         | 60.66                                     |          |



# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Date     | Elevation of<br>Top-of-Casing<br>(ft msl) | Depth to<br>Water<br>(ft bgs) | Elevation of<br>Water Surface<br>(ft msl) | Comments              |
|---------|----------|---|-------------------------------|---|-----------------------|
| MW-4    | 11/3/98  | 104.72                                    | 42.77                         | 61.95                                     | Well Developed        |
|         | 11/5/98  | 104.72                                    | 42.64                         | 62.08                                     |                       |
|         | 12/21/98 | 104.72                                    | 42.93                         | 61.79                                     |                       |
|         | 1/19/99  | 104.72                                    | 42.80                         | 61.92                                     |                       |
|         | 2/3/99   | 104.72                                    | 42.63                         | 62.09                                     |                       |
|         | 3/30/99  | 104.72                                    | 42.89                         | 61.83                                     |                       |
|         | 6/1/99   | 104.72                                    | 43.28                         | 61.44                                     |                       |
|         | 7/29/99  | 104.72                                    | 43.63                         | 61.09                                     |                       |
|         | 9/1/99   | 104.72                                    | 43.70                         | 61.02                                     |                       |
|         | 9/23/99  | 104.72                                    | 43.96                         | 60.76                                     |                       |
|         | 10/18/99 | 104.72                                    | 44.22                         | 60.50                                     |                       |
|         | 12/8/99  | 104.72                                    | 44.48                         | 60.24                                     |                       |
|         | 1/27/00  | 104.72                                    | 44.70                         | 60.02                                     |                       |
|         | 2/28/00  | 104.72                                    | NR                            | --  | Truck parked on well. |
|         | 3/15/00  | 104.72                                    | 44.37                         | 60.35                                     |                       |
|         | 4/13/00  | 104.72                                    | NR                            | --  | Truck parked on well. |
|         | 5/18/00  | 104.72                                    | 44.81                         | 59.91                                     |                       |
|         | 6/20/00  | 104.72                                    | 44.94                         | 59.78                                     |                       |
|         | 7/13/00  | 104.72                                    | 45.10                         | 59.62                                     |                       |
|         | 8/17/00  | 104.72                                    | 45.36                         | 59.36                                     |                       |
|         | 9/7/00   | 104.72                                    | 45.31                         | 59.41                                     |                       |
|         | 10/26/00 | 104.72                                    | 45.89                         | 58.83                                     |                       |
|         | 11/21/00 | 104.72                                    | 45.86                         | 58.86                                     |                       |
|         | 12/5/01  | 104.72                                    | 45.71                         | 59.01                                     |                       |
|         | 1/4/01   | 104.72                                    | 45.79                         | 58.93                                     |                       |
|         | 2/22/01  | 104.72                                    | 45.49                         | 59.23                                     |                       |
|         | 3/8/01   | 104.72                                    | 45.62                         | 59.10                                     |                       |

# TABLE 1

## ***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Date     | Elevation of<br>Top-of-Casing<br>(ft msl) | Depth to<br>Water<br>(ft bgs) | Elevation of<br>Water Surface<br>(ft msl) | Comments       |
|---------|----------|---|-------------------------------|---|----------------|
| MW-5    | 11/3/98  | 106.13                                    | 43.32                         | 62.81                                     | Well Developed |
|         | 11/5/98  | 106.13                                    | 43.30                         | 62.83                                     |                |
|         | 12/21/98 | 106.13                                    | 43.58                         | 62.55                                     |                |
|         | 1/19/99  | 106.13                                    | 43.46                         | 62.67                                     |                |
|         | 2/3/99   | 106.13                                    | 43.20                         | 62.93                                     |                |
|         | 3/30/99  | 106.13                                    | 43.49                         | 62.64                                     |                |
|         | 6/1/99   | 106.13                                    | 43.88                         | 62.25                                     |                |
|         | 7/29/99  | 106.13                                    | 44.19                         | 61.94                                     |                |
|         | 9/1/99   | 106.13                                    | 44.22                         | 61.91                                     |                |
|         | 9/23/99  | 106.13                                    | 44.48                         | 61.65                                     |                |
|         | 10/18/99 | 106.13                                    | 44.72                         | 61.41                                     |                |
|         | 12/8/99  | 106.13                                    | 44.98                         | 61.15                                     |                |
|         | 1/27/00  | 106.13                                    | 45.17                         | 60.96                                     |                |
|         | 2/28/00  | 106.13                                    | 45.15                         | 60.98                                     |                |
|         | 3/15/00  | 106.13                                    | 44.87                         | 61.26                                     |                |
|         | 4/13/00  | 106.13                                    | 45.22                         | 60.91                                     |                |
|         | 5/18/00  | 106.13                                    | 45.29                         | 60.84                                     |                |
|         | 6/20/00  | 106.13                                    | 45.30                         | 60.83                                     |                |
|         | 7/13/00  | 106.13                                    | 45.63                         | 60.50                                     |                |
|         | 8/17/00  | 106.13                                    | 45.85                         | 60.28                                     |                |
|         | 9/7/00   | 106.13                                    | 45.89                         | 60.44                                     |                |
|         | 10/26/00 | 106.13                                    | 46.35                         | 59.78                                     |                |
|         | 11/21/00 | 106.13                                    | 46.33                         | 59.80                                     |                |
|         | 12/5/00  | 106.13                                    | 46.16                         | 59.97                                     |                |
|         | 1/4/01   | 106.13                                    | 46.26                         | 59.87                                     |                |
|         | 2/22/01  | 106.13                                    | 46.00                         | 60.13                                     |                |
|         | 3/8/01   | 106.13                                    | 45.95                         | 60.18                                     |                |

**NOTES:**

ft msl = feet above mean sea level  
ft bgs = feet beneath ground surface  
NR = Not Recorded  
-- Not Applicable

1. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 6 March 1998 by Rattray & Associates, Inc.
2. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 21 December 1998 by Rattray & Associates, Inc.

# **TABLE 2** **Results of VOCs Detected in Groundwater Samples**

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Sample Number         | Sample Date | Analyte Concentration (ug/L) |         |         |         |         |           |           |      |        |
|---------|-----------------------|-------------|------------------------------|---------|---------|---------|---------|-----------|-----------|------|--------|
|         |                       |             | Benzene                      | Toluene | 1,1-DCA | 1,1-DCE | 1,2-DCA | c-1,2-DCE | t-1,2-DCE | PCE  | TCE    |
| MW-1    | MW-1-0304             | 3/4/98      | <100                         | <100    | <100    | 220     | <100    | 130       | <100      | 140  | 24,000 |
|         | MW-1-0304DUP          | 3/4/98      | <100                         | <100    | <100    | 210     | <100    | 150       | <100      | 160  | 25,000 |
|         | MW-1-0520             | 5/20/98     | <125                         | <125    | <125    | 160     | <125    | 130       | <125      | <125 | 24,000 |
|         | MW-1                  | 11/5/98     | <125                         | <125    | <125    | 140     | <125    | 160       | <125      | 170  | 28,000 |
|         | MW-1                  | 2/3/99      | <125                         | <125    | <125    | 130     | <125    | 160       | <125      | 160  | 27,000 |
|         | MW-1                  | 6/1/99      | <100                         | <100    | <100    | 140     | <100    | 190       | <100      | 160  | 28,000 |
|         | MW-1                  | 9/1/99      | <100                         | <100    | 140     | 220     | <100    | 200       | <100      | 190  | 32,000 |
|         | MW-1                  | 12/8/99     | <250                         | <250    | <250    | <250    | <250    | <250      | <250      | <250 | 30,000 |
|         | MW-1-A <sup>(3)</sup> | 12/8/99     | <100                         | <100    | 110     | 150     | <100    | 200       | <100      | 160  | 33,000 |
|         | MW-1                  | 3/15/00     | <100                         | <100    | <100    | 160     | <100    | 230       | <100      | 150  | 30,000 |
|         | MW-1                  | 6/20/00     | <100                         | <100    | <100    | <100    | <100    | <100      | <100      | <100 | 24,000 |
|         | MW-1                  | 9/7/00      | <100                         | <100    | <100    | <100    | <100    | <100      | <100      | <100 | 21,000 |
|         | MW-1                  | 12/5/00     | <100                         | <100    | <100    | <100    | <100    | <100      | <100      | <100 | 30,000 |
|         | MW-1                  | 3/8/01      | <100                         | <100    | <100    | <100    | <100    | <100      | <100      | <100 | 23,000 |
| MW-2    | MW-2-0304             | 3/4/98      | <10                          | <10     | 13      | 34      | <10     | 65        | <10       | <10  | 2,700  |
|         | MW-2-0520             | 5/20/98     | <10                          | <10     | 14      | 38      | <10     | 68        | <10       | <10  | 3,000  |
|         | MW-2                  | 11/5/98     | <10                          | <10     | 13      | 36      | <10     | 68        | <10       | <10  | 3,200  |
|         | MW-2                  | 2/3/99      | <10                          | <10     | 13      | 36      | <10     | 70        | <10       | <10  | 3,200  |
|         | MW-2                  | 6/1/99      | <10                          | <10     | 12      | 34      | <10     | 68        | <10       | <10  | 2,800  |
|         | MW-2                  | 9/1/99      | <10                          | <10     | 16      | 49      | <10     | 72        | <10       | <10  | 3,100  |
|         | MW-2                  | 12/8/99     | <13                          | <13     | <13     | <13     | <13     | 57        | <13       | <13  | 2,400  |
|         | MW-2-A <sup>(3)</sup> | 12/8/99     | <10                          | <10     | 12      | 22      | <10     | 63        | <10       | <10  | 2,600  |
|         | MW-2                  | 3/15/00     | <10                          | <10     | <10     | <10     | <10     | 74        | <10       | <10  | 2,800  |
|         | MW-2                  | 6/20/00     | <10                          | <10     | <10     | <10     | <10     | 46        | <10       | <10  | 2,000  |
|         | MW-2                  | 9/7/00      | <10                          | <10     | <10     | <10     | <10     | 42        | <10       | <10  | 1,800  |
|         | MW-2                  | 12/5/00     | <10                          | <10     | <10     | <10     | <10     | 50        | <10       | <10  | 2,300  |
|         | MW-2                  | 3/8/01      | <10                          | <10     | <10     | <10     | <10     | 44        | <10       | <10  | 1,800  |
|         | MW-2-DUP              | 3/8/01      | <10                          | <10     | <10     | <10     | <10     | 42        | <10       | <10  | 1,600  |

## TABLE 2

### *Results of VOCs Detected in Groundwater Samples*

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Sample Number         | Sample Date | Analyte Concentration (ug/L) |         |         |         |         |           |           |      |       |
|---------|-----------------------|-------------|------------------------------|---------|---------|---------|---------|-----------|-----------|------|-------|
|         |                       |             | Benzene                      | Toluene | 1,1-DCA | 1,1-DCE | 1,2-DCA | c-1,2-DCE | t-1,2-DCE | PCE  | TCE   |
| MW-3    | MW-3-0304             | 3/4/98      | <10                          | 13      | 14      | 82      | <10     | 200       | <10       | <10  | 2,800 |
|         | MW-3-0520             | 5/20/98     | <10                          | <10     | 13      | 58      | <10     | 230       | 15        | <10  | 2,800 |
|         | MW-3                  | 11/5/98     | <10                          | <10     | 11      | 66      | <10     | 240       | 18        | <10  | 2,300 |
|         | MW-3                  | 2/3/99      | <10                          | <10     | 11      | 64      | <10     | 220       | 18        | <10  | 2,000 |
|         | MW-3                  | 6/1/99      | <10                          | <10     | 11      | 66      | 53      | 240       | 18        | <10  | 1,900 |
|         | MW-3                  | 9/1/99      | <10                          | <10     | 13      | 80      | <10     | 270       | 20        | <10  | 2,600 |
|         | MW-3                  | 12/8/99     | <13                          | <13     | <13     | <13     | <13     | 220       | <13       | <13  | 2,500 |
|         | MW-3-A <sup>(2)</sup> | 12/8/99     | <10                          | <10     | 13      | 55      | <10     | 240       | 19        | <10  | 2,900 |
|         | MW-3                  | 3/15/00     | <10                          | <10     | 11      | 61      | <10     | 300       | 20        | <10  | 3,100 |
|         | MW-3                  | 6/20/00     | <10                          | <10     | 10      | <10     | <10     | 170       | 14        | <10  | 1,800 |
|         | MW-3-DUP              | 6/20/00     | <10                          | <10     | 11      | <10     | <10     | 200       | 18        | <10  | 2,100 |
|         | MW-3                  | 9/7/00      | <10                          | <10     | <10     | <10     | <10     | 160       | <10       | <10  | 1,700 |
|         | MW-3-DUP              | 9/7/00      | <10                          | <10     | <10     | <10     | <10     | 160       | <10       | <10  | 1,700 |
|         | MW-3                  | 12/5/00     | <10                          | <10     | <10     | <10     | <10     | 200       | <10       | <10  | 2,400 |
|         | MW-3-DUP              | 12/5/00     | <10                          | <10     | 20      | <10     | <10     | 210       | <10       | <10  | 2,500 |
|         | MW-3                  | 3/8/01      | <10                          | <10     | <10     | 55      | <10     | 200       | <10       | <10  | 1,700 |
| MW-4    | MW-4                  | 11/5/98     | <0.5                         | <0.5    | <0.5    | <0.5    | <0.5    | 0.67      | <0.5      | <0.5 | 6.7   |
|         | MW-4                  | 2/3/99      | <0.5                         | <0.5    | <0.5    | <0.5    | 2.1     | <0.5      | <0.5      | <0.5 | <0.5  |
|         | MW-4                  | 6/1/99      | <0.5                         | <0.5    | <0.5    | <0.5    | 65      | 1.1       | <0.5      | <0.5 | 0.90  |
|         | MW-4                  | 9/1/99      | <0.5                         | <0.5    | <0.5    | <0.5    | <0.5    | <0.5      | <0.5      | <0.5 | <0.5  |
|         | MW-4                  | 12/8/99     | 1.2                          | <0.5    | <0.5    | <0.5    | <0.5    | 4.1       | 1.0       | <0.5 | 17    |
|         | MW-4-A <sup>(3)</sup> | 12/8/99     | 1.2                          | <0.5    | <0.5    | <0.5    | <0.5    | 4.6       | 1.1       | <0.5 | 18    |
|         | MW-4                  | 3/15/00     | 77                           | <0.5    | <0.5    | <0.5    | <0.5    | <0.5      | <0.5      | <0.5 | 0.68  |
|         | MW-4                  | 6/20/00     | <0.5                         | <0.5    | <0.5    | <0.5    | <0.5    | <0.5      | <0.5      | <0.5 | <0.5  |
|         | MW-4                  | 9/7/00      | <0.5                         | <0.5    | <0.5    | <0.5    | <0.5    | <0.5      | <0.5      | <0.5 | <0.5  |
|         | MW-4                  | 12/5/00     | <0.5                         | <0.5    | <0.5    | <0.5    | <0.5    | <0.5      | <0.5      | <0.5 | <0.5  |
|         | MW-4                  | 3/8/01      | <0.5                         | <0.5    | <0.5    | <0.5    | <0.5    | <0.5      | <0.5      | <0.5 | <0.5  |

## TABLE 2

### *Results of VOCs Detected in Groundwater Samples*

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Sample Number             | Sample Date | Analyte Concentration (ug/L) |         |         |         |         |           |           |     |       |
|---------|---------------------------|-------------|------------------------------|---------|---------|---------|---------|-----------|-----------|-----|-------|
|         |                           |             | Benzene                      | Toluene | 1,1-DCA | 1,1-DCE | 1,2-DCA | c-1,2-DCE | t-1,2-DCE | PCE | TCE   |
| MW-5    | MW-5                      | 11/5/98     | <25                          | <25     | <25     | 42      | <25     | 380       | 30        | <25 | 5,000 |
|         | MW-5-DUP                  | 11/5/98     | <25                          | <25     | <25     | 40      | <25     | 360       | 29        | <25 | 4,800 |
|         | MW-5                      | 2/3/99      | <25                          | <25     | <25     | 49      | <25     | 420       | 35        | <25 | 5,100 |
|         | MW-5-DUP                  | 2/3/99      | <25                          | <25     | <25     | 45      | <25     | 370       | 31        | <25 | 4,500 |
|         | MW-5                      | 6/1/99      | <25                          | <25     | <25     | 52      | 35      | 420       | 36        | <25 | 5,500 |
|         | MW-5-DUP                  | 6/1/99      | <25                          | <25     | <25     | 56      | 39      | 430       | 35        | <25 | 5,300 |
|         | MW-5                      | 9/1/99      | <25                          | <25     | <25     | 40      | <25     | 420       | 45        | <25 | 5,500 |
|         | MW-5-DUP                  | 9/1/99      | <25                          | <25     | <25     | 69      | <25     | 440       | 45        | <25 | 6,000 |
|         | MW-5                      | 12/8/99     | <50                          | <50     | <50     | <50     | <50     | 390       | <50       | <50 | 5,100 |
|         | MW-5-A <sup>(3)</sup>     | 12/8/99     | <25                          | <25     | <25     | <25     | <25     | 410       | 25        | <25 | 5,300 |
|         | MW-5-DUP                  | 12/8/99     | <50                          | <50     | <50     | <50     | <50     | 360       | <50       | <50 | 5,000 |
|         | MW-5-DUP-A <sup>(3)</sup> | 12/8/99     | <25                          | <25     | <25     | <25     | <25     | 410       | 26        | <25 | 5,300 |
|         | MW-5                      | 3/15/00     | <50                          | <50     | <50     | <50     | <50     | 440       | <50       | <50 | 5,500 |
|         | MW-5-DUP                  | 3/15/00     | <50                          | <50     | <50     | <50     | <50     | 450       | <50       | <50 | 5,800 |
|         | MW-5                      | 6/20/00     | <25                          | <25     | <25     | <25     | <25     | 350       | <25       | <25 | 4,400 |
|         | MW-5                      | 9/7/00      | <10                          | <10     | <10     | <10     | <10     | 280       | <10       | <10 | 3,700 |
|         | MW-5                      | 12/5/00     | <10                          | <10     | <10     | <10     | <10     | 190       | <10       | <10 | 4,700 |
|         | MW-5                      | 3/8/01      | <25                          | 140     | <25     | <25     | <25     | 280       | <25       | <25 | 3,600 |

**NOTES:**

1,1-DCA = 1,1-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,2-DCA = 1,2-dichloroethane

c-1,2-DCE = cis-1,2-dichloroethene

t-1,2-DCE = trans-1,2-dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

VOCs = volatile organic compounds

ug/L = micrograms per liter

- Analyses performed by Orange Coast Analytical, Inc., in Tustin, California, using EPA Method 8260 for VOCs.
- < indicates that the analyte was not detected at a concentration above the indicated method detection limit.
- Samples collected on 8 December 1999 were initially analyzed on 9 December 1999 and were re-analyzed on 17 December 1999 in an attempt to achieve lower method detection limits.

# TABLE 3

## ***Additional Analytical Results for Groundwater Samples***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Well ID | Sample Number | Sample Date | Analyte Concentration (mg/L) |        |          |             |            |       |       |
|---------|---------------|-------------|------------------------------|--------|----------|-------------|------------|-------|-------|
|         |               |             | Arsenic                      | Barium | Chromium | Chromium VI | Molybdenum | Zinc  | TDS   |
| MW-1    | MW-1-0520     | 5/20/98     | --                           | --     | --       | --          | --         | --    | 1,500 |
|         | MW-1          | 3/8/01      | 0.32                         | 0.13   | <0.01    | <0.01       | 0.47       | 0.016 | --    |
| MW-2    | MW-2-0520     | 5/20/98     | --                           | --     | --       | --          | --         | --    | 2,500 |
|         | MW-2          | 3/8/01      | 0.0066                       | 0.019  | <0.01    | <0.01       | 1.1        | 0.015 | --    |
|         | MW-2-DUP      | 3/8/01      | 0.0056                       | 0.019  | <0.01    | <0.01       | 1.1        | 0.014 | --    |
| MW-3    | MW-3-0520     | 5/20/98     | --                           | --     | --       | --          | --         | --    | 1,100 |
|         | MW-3          | 3/8/01      | 0.080                        | 0.15   | <0.01    | <0.01       | 0.71       | 0.012 | --    |
| MW-4    | MW-4          | 3/8/01      | 0.0079                       | 0.027  | <0.01    | <0.01       | <0.05      | 0.025 | --    |
| MW-5    | MW-5          | 3/8/01      | 0.19                         | 0.15   | <0.01    | <0.01       | 0.84       | 0.014 | --    |

**NOTES:**

TDS = total dissolved solids

-- indicates not analyzed

mg/L = milligrams per liter

1. The following analyses were performed by Orange Coast Analytical, Inc., in Tustin, California:

Total Arsenic by EPA Method 206.2, CCR Metals by EPA Methods 200.7, 218.4, and 245.1, and TDS by EPA Method 160.1.

2. < indicates that the analyte was not detected at a concentration above the indicated method detection limit.

# TABLE 4a

## Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Operation Time | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal |                     | Cumulative Mass Removal |                  |       |  |
|---|-------|----------------------------------|----------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------|---------------------|-------------------------|------------------|-------|--|
|   |       |                                  |                | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)          | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |  |
| System startup on 3/16/00 at 16:00.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 3/16/00   | 16:45 | 5.6                              | 0%             | 4.5    | 4.1    | 35             | 2,000+                   | 860                     | 1.8                   | 1.9                 | 0                       | 0                |       |  |
| 3/17/00   | 7:00  | 20                               | 100%           | 5.2    | 4.7    | 37             | 94                       | -                       |                       |                     |                         |                  |       |  |
| 3/18/00   | 6:30  | 45                               | 100%           | 5.4    | 4.9    | 38             | 128                      | -                       |                       |                     |                         |                  |       |  |
| System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 3/19/00   | 6:30  | 48                               | 13%            | 6.1    | 5.53   | 38             | 103                      | -                       |                       |                     |                         |                  |       |  |
| 3/20/00   | 6:30  | 72                               | 100%           | 8.6    | 7.7    | 43             | 145                      | -                       |                       |                     |                         |                  |       |  |
| 3/21/00   | 7:00  | 96                               | 100%           | 4.8    | 4.1    | 60             | 745                      | -                       |                       |                     |                         |                  |       |  |
| 3/22/00   | 7:30  | 121                              | 100%           | 11     | 10     | 15             | 173                      | 490                     | 2.5                   | 2.6                 | 10                      | 11               | 4A    |  |
| 3/30/00   | 11:00 | 316                              | 100%           | 20     | 18     | 45             | 39                       | -                       |                       |                     |                         |                  |       |  |
| 4/6/00  | 11:00 | 483                              | 100%           | 25     | 17     | 125            | 42                       | -                       |                       |                     |                         |                  |       |  |
| 4/13/00   | 8:00  | 648                              | 100%           | 21     | 13     | 150            | 42                       | 70                      | 0.45                  | 0.51                | 43                      | 45               | 4A    |  |
| 4/20/00   | 7:30  | 815                              | 100%           | 21     | 13     | 145            | 43                       | -                       |                       |                     |                         |                  |       |  |
| 4/27/00   | 7:00  | 983                              | 100%           | 16     | 10     | 150            | 30                       | -                       |                       |                     |                         |                  |       |  |
| 5/4/00  | 8:30  | 1,152                            | 100%           | 16     | 10     | 150            | 20                       | -                       |                       |                     |                         |                  |       |  |
| 5/11/00   | 6:30  | 1,318                            | 100%           | 14     | 9.0    | 150            | 20                       | -                       |                       |                     |                         |                  |       |  |
| 5/18/00   | 7:00  | 1,486                            | 100%           | 19     | 12     | 150            | 38                       | 53                      | 0.32                  | 0.34                | 56                      | 60               | 4A    |  |
|   |       |                                  |                | 28     | 18     | 150            | 38                       | -                       | 0.47                  | 0.50                | -                       | -                |       |  |
| 5/25/00   | 6:30  | 1,654                            | 100%           | 18     | 12     | 150            | 19                       | -                       |                       |                     |                         |                  |       |  |
| 6/1/00  | 6:30  | 1,822                            | 100%           | 18     | 11     | 150            | 34                       | -                       |                       |                     |                         |                  |       |  |
| 6/8/00  | 7:00  | 1,990                            | 100%           | 26     | 16     | 155            | 27                       | -                       |                       |                     |                         |                  |       |  |
| 6/15/00   | 7:30  | 2,158                            | 100%           | 26     | 16     | 150            | 28                       | -                       |                       |                     |                         |                  |       |  |
| System shut down on 6/21/00 at 17:30. System restarted on 7/6/00 at 10:00.  |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 7/6/00  | 10:23 | 2,312                            | 30%            | 142    | 97     | 130            | 20                       | 37                      | 1.8                   | 2.1                 | 72                      | 77               | 4B    |  |
| 7/13/00   | 12:00 | 2,485                            | 102%           | 122    | 79     | 145            | 23                       | 18                      | 0.70                  | 1.0                 | 81                      | 88               | 4A    |  |
| 7/20/00   | 7:30  | 2,648                            | 100%           | 115    | 73     | 150            | 15                       | -                       |                       |                     |                         |                  |       |  |
| System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 7/27/00   | 6:00  | 2,791                            | 86%            | 75     | 49     | 140            | 14                       | -                       |                       |                     |                         |                  |       |  |
| 8/3/00  | 8:00  | 2,961                            | 100%           | 75     | 49     | 140            | 15                       | -                       |                       |                     |                         |                  |       |  |
| 8/8/00  | 14:30 | 3,086                            | 100%           | 77     | 50     | 140            | 15                       | -                       |                       |                     |                         |                  |       |  |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30. |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 8/24/00   | 12:30 | 3,326                            | 63%            | 76     | 50     | 140            | 27                       | -                       |                       |                     |                         |                  |       |  |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.  |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 8/31/00   | 9:00  | 3,471                            | 88%            | 64     | 45     | 120            | 36                       | -                       |                       |                     |                         |                  |       |  |

# TABLE 4a

## Soil Vapor Extraction Data: Blower Influent

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Operation Time | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal |                     | Cumulative Mass Removal |                  |       |  |
|--|-------|----------------------------------|----------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------|---------------------|-------------------------|------------------|-------|--|
|  |       |                                  |                | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)          | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |  |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.             |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 9/7/00   | 10:30 | 3,621                            | 88%            | 66     | 46     | 125            | 9.7                      | -                       |                       |                     |                         |                  |       |  |
| 9/14/00  | 9:00  | 3,788                            | 100%           | 66     | 43     | 140            | 13                       | 5.6                     | 0.12                  | 0.29                | 104                     | 124              | 4A    |  |
| System shut down on 9/14/00 for rebound test.                                |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 9/28/00  | 11:24 | 3,788                            | 0%             | -      | -      | 120            | 42                       | 54                      | -                     | -                   | -                       | -                |       |  |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 10/1/00  | 6:30  | 3,791                            | 4%             | -      | -      | -              | -                        | -                       |                       |                     |                         |                  |       |  |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 10/5/00  | 7:30  | 3,795                            | 4%             | 73     | 52     | 120            | 296                      | -                       |                       |                     |                         |                  |       |  |
| 10/12/00   | 8:00  | 3,964                            | 100%           | 74     | 52     | 120            | 39                       | -                       |                       |                     |                         |                  |       |  |
| 10/19/00   | 8:00  | 4,132                            | 100%           | 72     | 51     | 120            | 39                       | -                       |                       |                     |                         |                  |       |  |
| 10/26/00   | 8:00  | 4,301                            | 100%           | 75     | 54     | 115            | 18                       | 2.3                     | 0.061                 | 0.15                | 106                     | 128              | 4A    |  |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 11/2/00  | 8:00  | 4,422                            | 72%            | -      | -      | 140            | 17                       | -                       |                       |                     |                         |                  |       |  |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 11/9/00  | 7:30  | 4,433                            | 7%             | -      | -      | 140            | 397                      | -                       |                       |                     |                         |                  |       |  |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00. |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 11/16/00   | 10:00 | 4,441                            | 5%             | -      | -      | 140            | 144                      | -                       |                       |                     |                         |                  |       |  |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30. |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 11/23/00   | 7:30  | 4,443                            | 1%             | -      | -      | 140            | 152                      | -                       |                       |                     |                         |                  |       |  |
| 11/30/00   | 7:30  | 4,611                            | 100%           | -      | -      | 140            | 121                      | -                       |                       |                     |                         |                  |       |  |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.   |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 12/7/00  | 8:00  | 4,768                            | 93%            | -      | -      | 140            | 107                      | -                       |                       |                     |                         |                  |       |  |
| 12/14/00   | 10:30 | 4,940                            | 100%           | 57     | 38     | 140            | 6.2                      | 6.7                     | 0.13                  | 0.23                | 108                     | 133              | 4A    |  |
| System shut down on 12/14/00 for rebound test.                               |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |  |
| 1/4/01   | 11:37 | 4,940                            | 0%             | 170    | 111    | 140            | 44                       | 30                      | -                     | -                   | -                       | -                |       |  |



## TABLE 4a

### ***Soil Vapor Extraction Data: Blower Influent***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Operation Time | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|----------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  |                | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)          | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45. |       |                                  |                |        |        |                |                          |                         |                       |                     |                         |                  |       |
| 2/19/01   | 15:45 | 4,940                            | 0%             | -      | -      | 140            | 42                       | -                       |                       |                     |                         |                  |       |
| 2/22/01   | 17:00 | 5,016                            | 100%           | -      | -      | 140            | 37                       | -                       |                       |                     |                         |                  |       |
| 3/1/01  | 12:45 | 5,180                            | 100%           | -      | -      | 140            | 29                       | -                       |                       |                     |                         |                  |       |
| 3/8/01  | 7:30  | 5,343                            | 100%           | -      | -      | 145            | 48                       | -                       |                       |                     |                         |                  |       |
| 3/15/01   | 13:00 | 5,516                            | 100%           | -      | -      | 145            | 8.5                      | -                       |                       |                     |                         |                  |       |
| 3/22/01   | 13:00 | 5,682                            | 100%           | -      | -      | 145            | 7.8                      | -                       |                       |                     |                         |                  |       |
| 3/29/01   | 14:30 | 5,854                            | 100%           | -      | -      | 140            | 8.5                      | -                       | -                     | -                   | -                       | -                | -     |

#### NOTES:

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- Cumulative mass removal amounts are calculated as follows (see Notes column in table):
  - Mass removal calculated using an average of the previous and current mass removal rates.
  - Mass removal calculated using the previous mass removal rate.
- On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples of undiluted blower influent. The total VOC mass removal rate presented in this table is the sum of the undiluted mass removal rates calculated for each VOC that was detected.

# TABLE 4b

## Soil Vapor Extraction Data: Extraction Well SVE-1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|--|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|  |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| Static vapor sample collected on 3/16/00.                                      |       |                                  |        |        |                | 865                      | 10,000                  | 0.18                        | 0.19                | 0                       | 0                |       |
| System startup on 3/16/00 at 16:00.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/17/00  | 7:00  | 20                               | 0.04   | 0.04   | 37             | 191                      | -                       |                             |                     |                         |                  |       |
| 3/18/00  | 6:30  | 45                               | 0.06   | 0.05   | 38             | 195                      | -                       |                             |                     |                         |                  |       |
| System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/19/00  | 6:30  | 48                               | 0.70   | 0.63   | 38             | 2,000+                   | -                       |                             |                     |                         |                  |       |
| 3/20/00  | 6:30  | 72                               | 0.63   | 0.56   | 43             | 2,000+                   | -                       |                             |                     |                         |                  |       |
| 3/21/00  | 7:00  | 96                               | 0.61   | 0.52   | 60             | 2,000+                   | -                       |                             |                     |                         |                  |       |
| 3/22/00  | 7:30  | 121                              | 0.58   | 0.56   | 15             | 2,000+                   | 10,000                  | 2.8                         | 2.9                 | 7.1                     | 7.3              | 4A    |
| 3/30/00  | 11:00 | 316                              | 0.87   | 0.79   | 38             | 1,799                    | -                       |                             |                     |                         |                  |       |
| 4/6/00   | 11:00 | 483                              | 0.45   | 0.31   | 125            | 719                      | -                       |                             |                     |                         |                  |       |
| 4/13/00  | 8:00  | 648                              | 0.85   | 0.54   | 150            | 716                      | 6,500                   | 1.7                         | 1.8                 | 57                      | 58               | 4A    |
| 4/20/00  | 7:30  | 815                              | 0.70   | 0.45   | 145            | 868                      | -                       |                             |                     |                         |                  |       |
| 4/27/00  | 7:00  | 983                              | 0.87   | 0.55   | 150            | 915                      | -                       |                             |                     |                         |                  |       |
| 5/4/00   | 8:30  | 1,152                            | 0.89   | 0.56   | 150            | 1,427                    | -                       |                             |                     |                         |                  |       |
| 5/11/00  | 6:30  | 1,318                            | 0.92   | 0.58   | 150            | 2,000+                   | -                       |                             |                     |                         |                  |       |
| 5/18/00  | 7:00  | 1,486                            | 1.1    | 0.68   | 150            | 276                      | 3,700                   | 1.2                         | 1.3                 | 109                     | 112              | 4A    |
|  |       |                                  | 1.1    | 0.69   | 150            | 276                      | -                       | 1.3                         | 1.3                 | -                       | -                |       |
| 5/25/00  | 6:30  | 1,654                            | 1.3    | 0.84   | 150            | 146                      | -                       |                             |                     |                         |                  |       |
| 6/1/00   | 6:30  | 1,822                            | 0.65   | 0.41   | 150            | 128                      | -                       |                             |                     |                         |                  |       |
| 6/8/00   | 7:00  | 1,990                            | 0.67   | 0.41   | 155            | 112                      | -                       |                             |                     |                         |                  |       |
| 6/15/00  | 7:30  | 2,158                            | 0.65   | 0.41   | 150            | 105                      | -                       |                             |                     |                         |                  |       |
| System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/6/00   | 9:49  | 2,312                            | 1.3    | 0.89   | 130            | 1,582                    | 3,300                   | -                           | -                   | -                       | -                |       |
| System restarted on 7/6/00 at 10:00.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/13/00  | 12:00 | 2,485                            | 1.3    | 0.84   | 145            | 2,000+                   | 2,200                   | 0.92                        | 0.95                | 154                     | 159              | 4A    |
| 7/20/00  | 7:30  | 2,648                            | 1.3    | 0.83   | 150            | 154                      | -                       |                             |                     |                         |                  |       |
| System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/27/00  | 6:00  | 2,791                            | 2.0    | 1.3    | 140            | 77                       | -                       |                             |                     |                         |                  |       |
| 8/3/00   | 8:00  | 2,961                            | 2.1    | 1.4    | 140            | 89                       | -                       |                             |                     |                         |                  |       |
| 8/8/00   | 14:30 | 3,086                            | 2.1    | 1.4    | 140            | 92                       | -                       |                             |                     |                         |                  |       |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.    |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |

# TABLE 4b

## ***Soil Vapor Extraction Data: Extraction Well SVE-1***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  | Notes |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) |       |
| 8/24/00   | 12:30 | 3,326                            | 2.3    | 1.5    | 140            | 622                      | -                       |                             |                     |                         |                  |       |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/31/00   | 9:00  | 3,471                            | 0.96   | 0.68   | 120            | 1,820                    | -                       |                             |                     |                         |                  |       |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.                        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/7/00  | 10:30 | 3,621                            | 1.1    | 0.78   | 125            | 62                       | -                       |                             |                     |                         |                  |       |
| 9/14/00   | 9:00  | 3,788                            | 1.6    | 1.0    | 140            | 76                       | 300                     | 0.15                        | 0.16                | 183                     | 189              | 4A    |
| System shut down on 9/14/00 for rebound test. Static vapor sample collected on 9/28/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/28/00   | 11:07 | 3,788                            | 1.6    | 1.1    | 120            | 2,000+                   | 230                     | -                           | -                   | -                       | -                |       |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/1/00   | 6:30  | 3,791                            | -      | -      | -              | -                        | -                       |                             |                     |                         |                  |       |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/5/00   | 7:30  | 3,795                            | 2.3    | 1.6    | 120            | 2,000+                   | -                       |                             |                     |                         |                  |       |
| 10/12/00  | 8:00  | 3,964                            | 2.4    | 1.7    | 120            | 1,687                    | -                       |                             |                     |                         |                  |       |
| 10/19/00  | 8:00  | 4,132                            | 2.4    | 1.7    | 120            | 651                      | -                       |                             |                     |                         |                  |       |
| 10/26/00  | 8:00  | 4,301                            | 2.4    | 1.7    | 115            | 385                      | 140                     | 0.12                        | 0.12                | 186                     | 192              | 4A    |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/2/00   | 8:00  | 4,422                            | 3.6    | 2.4    | 140            | 289                      | -                       |                             |                     |                         |                  |       |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/9/00   | 7:30  | 4,433                            | 2.5    | 1.6    | 140            | 2,000+                   | -                       |                             |                     |                         |                  |       |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/16/00  | 10:00 | 4,441                            | 2.7    | 1.7    | 140            | 2,000+                   | -                       |                             |                     |                         |                  |       |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/23/00  | 7:30  | 4,443                            | 2.5    | 1.7    | 140            | 2,000+                   | -                       |                             |                     |                         |                  |       |
| 11/30/00  | 7:30  | 4,611                            | 12.4   | 8.1    | 140            | 748                      | -                       |                             |                     |                         |                  |       |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 12/7/00   | 8:00  | 4,768                            | 8.3    | 5.4    | 140            | 111                      | -                       |                             |                     |                         |                  |       |
| 12/14/00  | 10:30 | 4,940                            | 2.4    | 1.6    | 140            | 43                       | 260                     | 0.21                        | 0.22                | 191                     | 197              | 4A    |
| System shut down on 12/14/00 for rebound test.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 1/4/01  | 11:02 | 4,940                            | 2.3    | 1.6    | 120            | 515                      | 350                     | -                           | -                   | -                       | -                |       |

# TABLE 4b

## ***Soil Vapor Extraction Data: Extraction Well SVE-1***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 2/19/01   | 15:45 | 4,940                            | 2.5    | 1.6    | 140            | 875                      | -                       |                             |                     |                         |                  |       |
| 2/22/01   | 17:00 | 5,016                            | 2.6    | 1.7    | 140            | 801                      | -                       |                             |                     |                         |                  |       |
| 3/1/01  | 12:45 | 5,180                            | 2.5    | 1.7    | 140            | 1,505                    | -                       |                             |                     |                         |                  |       |
| 3/8/01  | 7:30  | 5,343                            | 2.5    | 1.6    | 145            | 79                       | -                       |                             |                     |                         |                  |       |
| 3/15/01   | 13:00 | 5,516                            | 2.5    | 1.6    | 145            | 37                       | -                       |                             |                     |                         |                  |       |
| 3/22/01   | 13:00 | 5,682                            | 2.6    | 1.6    | 145            | 53                       | -                       |                             |                     |                         |                  |       |
| 3/29/01   | 14:30 | 5,854                            | 2.3    | 1.6    | 130            | 38                       | -                       | -                           | -                   | -                       | -                |       |

### NOTES:

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- Cumulative mass removal amounts are calculated as follows:  
A: Mass removal calculated using an average of the previous and current mass removal rates.
- On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- Extraction well SVE-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

# TABLE 4c

## Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|--|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|  |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| Static vapor sample collected on 3/16/00.                                      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/16/00  | 10:10 | 5.6                              | 0.61   | 0.56   | 35             | 227                      | 75                      | 0.021                       | 0.021               | 0                       | 0                |       |
| System Startup on 3/16/00 at 16:00.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/17/00  | 7:00  | 20.3                             | 0.61   | 0.55   | 37             | 191                      | -                       |                             |                     |                         |                  |       |
| 3/18/00  | 6:30  | 44.7                             | 0.61   | 0.55   | 38             | 33                       | -                       |                             |                     |                         |                  |       |
| System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/19/00  | 6:30  | 47.9                             | 0.65   | 0.59   | 38             | 298                      | -                       |                             |                     |                         |                  |       |
| 3/20/00  | 6:30  | 72.2                             | 0.94   | 0.84   | 43             | 235                      | -                       |                             |                     |                         |                  |       |
| 3/21/00  | 7:00  | 96.3                             | 0.89   | 0.76   | 60             | 227                      | -                       |                             |                     |                         |                  |       |
| 3/22/00  | 7:30  | 120.5                            | 0.57   | 0.55   | 15             | 93                       | -                       |                             |                     |                         |                  |       |
| 3/30/00  | 11:00 | 316                              | 0.59   | 0.53   | 38             | 78                       | -                       |                             |                     |                         |                  |       |
| 4/6/00   | 11:00 | 483                              | 0.74   | 0.51   | 125            | 38                       | -                       |                             |                     |                         |                  |       |
| 4/13/00  | 8:00  | 648                              | 2.5    | 1.6    | 150            | 26                       | -                       |                             |                     |                         |                  |       |
| 4/20/00  | 7:30  | 815                              | 1.1    | 0.71   | 145            | 5.4                      | -                       |                             |                     |                         |                  |       |
| 4/27/00  | 7:00  | 983                              | 2.4    | 1.5    | 150            | 2.7                      | -                       |                             |                     |                         |                  |       |
| 5/4/00   | 8:30  | 1,152                            | 2.3    | 1.5    | 150            | 5.8                      | -                       |                             |                     |                         |                  |       |
| 5/11/00  | 6:30  | 1,318                            | 2.2    | 1.4    | 150            | 5.2                      | -                       |                             |                     |                         |                  |       |
| 5/18/00  | 7:00  | 1,486                            | 2.2    | 1.4    | 150            | 13                       | -                       |                             |                     |                         |                  |       |
|  |       |                                  | 2.0    | 1.3    | 150            | 13                       | -                       |                             |                     |                         |                  |       |
| 5/25/00  | 6:30  | 1,654                            | 2.1    | 1.3    | 150            | 6.8                      | -                       |                             |                     |                         |                  |       |
| 6/1/00   | 6:30  | 1,822                            | 2.1    | 1.3    | 150            | 28                       | -                       |                             |                     |                         |                  |       |
| 6/8/00   | 7:00  | 1,990                            | 2.1    | 1.3    | 155            | 42                       | -                       |                             |                     |                         |                  |       |
| 6/15/00  | 7:30  | 2,158                            | 2.1    | 1.3    | 150            | 38                       | -                       |                             |                     |                         |                  |       |
| System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/6/00   | 9:25  | 2,312                            | 1.2    | 0.83   | 130            | 37                       | 120                     | 0.050                       | 0.054               | 3.4                     | 3.6              | 4A    |
| System restarted on 7/6/00 at 10:00.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/13/00  | 12:00 | 2,485                            | 1.3    | 0.80   | 145            | 6.8                      | -                       |                             |                     |                         |                  |       |
| 7/20/00  | 7:30  | 2,648                            | 1.3    | 0.80   | 150            | 27                       | -                       |                             |                     |                         |                  |       |
| System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/27/00  | 6:00  | 2,791                            | 1.6    | 1.1    | 140            | 18                       | -                       |                             |                     |                         |                  |       |
| 8/3/00   | 7:30  | 2,961                            | 1.6    | 1.0    | 140            | 17                       | -                       |                             |                     |                         |                  |       |
| 8/8/00   | 14:30 | 3,086                            | 1.6    | 1.0    | 140            | 14                       | -                       |                             |                     |                         |                  |       |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.    |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/24/00  | 12:30 | 3,326                            | 1.9    | 1.2    | 140            | 1.7                      | -                       |                             |                     |                         |                  |       |

# TABLE 4c

## Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |  |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|--|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |  |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 8/31/00   | 9:00  | 3,471                            | 1.5    | 1.1    | 120            | 22                       | -                       |                             |                     |                         |                  |       |  |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.                        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 9/7/00  | 10:30 | 3,621                            | 1.6    | 1.1    | 125            | 16                       | -                       |                             |                     |                         |                  |       |  |
| 9/14/00   | 9:00  | 3,788                            | 1.6    | 1.1    | 140            | 20                       | 77                      | 0.041                       | 0.042               | 6.2                     | 6.5              | 4A    |  |
| System shut down on 9/14/00 for rebound test. Static vapor sample collected on 9/28/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 9/28/00   | 10:50 | 3,788                            | 1.4    | 1.0    | 120            | 61                       | 110                     | -                           | -                   | -                       | -                |       |  |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 10/1/00   | 6:30  | 3,791                            | -      | -      | -              | -                        | -                       |                             |                     |                         |                  |       |  |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 10/5/00   | 7:30  | 3,795                            | 1.9    | 1.4    | 120            | 9.7                      | -                       |                             |                     |                         |                  |       |  |
| 10/12/00  | 8:00  | 3,964                            | 1.9    | 1.4    | 120            | 97                       | -                       |                             |                     |                         |                  |       |  |
| 10/19/00  | 8:00  | 4,132                            | 1.9    | 1.3    | 120            | 33                       | -                       |                             |                     |                         |                  |       |  |
| 10/26/00  | 8:00  | 4,301                            | 2.1    | 1.5    | 115            | 28                       | -                       |                             |                     |                         |                  |       |  |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 11/2/00   | 8:00  | 4,422                            | -      | -      | 140            | 6.0                      | -                       |                             |                     |                         |                  |       |  |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 11/9/00   | 7:30  | 4,433                            | -      | -      | 140            | 8.2                      | -                       |                             |                     |                         |                  |       |  |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 11/16/00  | 10:00 | 4,441                            | -      | -      | 140            | 810                      | -                       |                             |                     |                         |                  |       |  |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 11/23/00  | 7:30  | 4,443                            | -      | -      | 140            | 7.5                      | -                       |                             |                     |                         |                  |       |  |
| 11/30/00  | 7:30  | 4,611                            | -      | -      | 140            | 5.3                      | -                       |                             |                     |                         |                  |       |  |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 12/7/00   | 8:00  | 4,768                            | -      | -      | 140            | 40                       | -                       |                             |                     |                         |                  |       |  |
| 12/14/00  | 10:30 | 4,940                            | 2.9    | 1.9    | 140            | 9.7                      | 29                      | 0.027                       | 0.029               | 7.8                     | 8.2              | 4A    |  |
| System shut down on 12/14/00 for rebound test.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 1/4/01  | 10:20 | 4,940                            | 1.9    | 1.3    | 120            | 25                       | 34                      | -                           | -                   | -                       | -                |       |  |

## TABLE 4c

### Soil Vapor Extraction Data: Extraction Well SVE-2

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 2/19/01   | 15:45 | 4,940                            | -      | -      | 140            | 38                       | -                       |                             |                     |                         |                  |       |
| 2/22/01   | 17:00 | 5,016                            | -      | -      | 140            | 46                       | -                       |                             |                     |                         |                  |       |
| 3/1/01  | 12:45 | 5,180                            | -      | -      | 140            | 61                       | -                       |                             |                     |                         |                  |       |
| 3/8/01  | 7:30  | 5,343                            | -      | -      | 145            | 33                       | -                       |                             |                     |                         |                  |       |
| 3/15/01   | 13:00 | 5,516                            | -      | -      | 145            | 5.8                      | -                       |                             |                     |                         |                  |       |
| 3/22/01   | 13:00 | 5,682                            | -      | -      | 145            | 3.7                      | -                       |                             |                     |                         |                  |       |
| 3/29/01   | 14:30 | 5,854                            | -      | -      | 140            | 7.5                      | -                       | -                           | -                   | -                       | -                |       |

#### NOTES:

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- Cumulative mass removal amounts are calculated as follows:  
A: Mass removal calculated using an average of the previous and current mass removal rates.
- On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- Extraction well SVE-2 is screened in the shallow vadose zone from 18 to 24 feet below ground surface.

# TABLE 4d

## Soil Vapor Extraction Data: Extraction Well SVE-3

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|--|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|  |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| Static vapor sample collected on 3/16/00.                                      |       |                                  |        |        |                | 31                       | 25                      | 0.0047                      | 0.0054              | 0                       | 0                |       |
| 3/16/00  | 9:57  | 5.6                              | 0.41   | 0.37   | 35             |                          |                         |                             |                     |                         |                  |       |
| System Startup on 3/16/00 at 16:00.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/17/00  | 7:00  | 20.3                             | 0.98   | 0.89   | 37             | 6.1                      | -                       |                             |                     |                         |                  |       |
| 3/18/00  | 6:30  | 44.7                             | 0.98   | 0.89   | 38             | 8.3                      | -                       |                             |                     |                         |                  |       |
| System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/19/00  | 6:30  | 47.9                             | 0.98   | 0.89   | 38             | 45                       | -                       |                             |                     |                         |                  |       |
| 3/20/00  | 6:30  | 72.2                             | 0.98   | 0.88   | 43             | 7.4                      | -                       |                             |                     |                         |                  |       |
| 3/21/00  | 7:00  | 96.3                             | 1.0    | 0.85   | 60             | 11                       | -                       |                             |                     |                         |                  |       |
| 3/22/00  | 7:30  | 120.5                            | 0.95   | 0.91   | 15             | 10                       | -                       |                             |                     |                         |                  |       |
| 3/30/00  | 11:00 | 316.0                            | 0.76   | 0.69   | 38             | 29                       | -                       |                             |                     |                         |                  |       |
| 4/6/00   | 11:00 | 483.0                            | 1.6    | 1.1    | 125            | 25                       | -                       |                             |                     |                         |                  |       |
| 4/13/00  | 8:00  | 648.0                            | 2.1    | 1.3    | 150            | 22                       | -                       |                             |                     |                         |                  |       |
| 4/20/00  | 7:30  | 815.0                            | 1.7    | 1.1    | 145            | 6.8                      | -                       |                             |                     |                         |                  |       |
| 4/27/00  | 7:00  | 983.0                            | 1.2    | 0.78   | 150            | 4.3                      | -                       |                             |                     |                         |                  |       |
| 5/4/00   | 8:30  | 1,152.0                          | 1.6    | 0.98   | 150            | 2.8                      | -                       |                             |                     |                         |                  |       |
| 5/11/00  | 6:30  | 1,318.0                          | 1.6    | 1.0    | 150            | 2.2                      | -                       |                             |                     |                         |                  |       |
| 5/18/00  | 7:00  | 1,486.0                          | 1.6    | 0.98   | 150            | 9.0                      | -                       |                             |                     |                         |                  |       |
|  |       |                                  | 1.6    | 0.98   | 150            | 9.0                      | -                       |                             |                     |                         |                  |       |
| 5/25/00  | 6:30  | 1,654.0                          | 1.6    | 0.99   | 150            | 4.2                      | -                       |                             |                     |                         |                  |       |
| 6/1/00   | 6:30  | 1,822.0                          | 1.5    | 0.95   | 150            | 7.5                      | -                       |                             |                     |                         |                  |       |
| 6/8/00   | 7:00  | 1,990.0                          | 1.4    | 0.88   | 155            | 5.2                      | -                       |                             |                     |                         |                  |       |
| 6/15/00  | 7:30  | 2,158.0                          | 1.4    | 0.90   | 150            | 4.9                      | -                       |                             |                     |                         |                  |       |
| System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. |       |                                  |        |        |                |                          |                         |                             |                     | 0.50                    | 0.71             | 4A    |
| 7/6/00   | 8:46  | 2,312                            | 2.3    | 1.5    | 130            | 7.3                      | 7.4                     | 0.0057                      | 0.0095              |                         |                  |       |
| System restarted on 7/6/00 at 10:00.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/13/00  | 12:00 | 2,485                            | 2.3    | 1.5    | 145            | 3.5                      | -                       |                             |                     |                         |                  |       |
| 7/20/00  | 7:30  | 2,648                            | 2.2    | 1.4    | 150            | 4.1                      | -                       |                             |                     |                         |                  |       |
| System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.      |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/27/00  | 6:00  | 2,791                            | 1.9    | 1.3    | 140            | 5.1                      | -                       |                             |                     |                         |                  |       |
| 8/3/00   | 8:00  | 2,961                            | 1.9    | 1.2    | 140            | 2.2                      | -                       |                             |                     |                         |                  |       |
| 8/8/00   | 14:30 | 2,961                            | 1.9    | 1.3    | 140            | 2.3                      | -                       |                             |                     |                         |                  |       |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.    |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/24/00  | 12:30 | 3,326                            | 2.0    | 1.3    | 140            | 1.9                      | -                       |                             |                     |                         |                  |       |



# TABLE 4d

## *Soil Vapor Extraction Data: Extraction Well SVE-3*

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/31/00   | 9:00  | 3,471                            | 1.4    | 1.0    | 120            | 2.6                      | -                       |                             |                     |                         |                  |       |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.                        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/7/00  | 10:30 | 3,621                            | 1.4    | 1.0    | 125            | 1.2                      | -                       |                             |                     |                         |                  |       |
| 9/14/00   | 9:00  | 3,788                            | 1.5    | 1.0    | 140            | 1.5                      | 2.5                     | 0.0012                      | 0.0028              | 0.71                    | 1.1              | 4A    |
| System shut down on 9/14/00 for rebound test. Static vapor sample collected on 9/28/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/28/00   | 9:52  | 3,788                            | -      | -      | 120            | 8.0                      | 3.8                     | -                           | -                   | -                       | -                |       |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/1/00   | 6:30  | 3,791                            | -      | -      | -              | -                        | -                       |                             |                     |                         |                  |       |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/5/00   | 7:30  | 3,795                            | 1.8    | 1.3    | 120            | 4.6                      | -                       |                             |                     |                         |                  |       |
| 10/12/00  | 8:00  | 3,964                            | 1.9    | 1.3    | 120            | 5.6                      | -                       |                             |                     |                         |                  |       |
| 10/19/00  | 8:00  | 4,132                            | 1.9    | 1.3    | 120            | 4.1                      | -                       |                             |                     |                         |                  |       |
| 10/26/00  | 8:00  | 4,301                            | 1.9    | 1.3    | 115            | 4.1                      | -                       |                             |                     |                         |                  |       |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/2/00   | 8:00  | 4,422                            | 7.1    | 4.7    | 140            | 0.5                      | -                       |                             |                     |                         |                  |       |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/9/00   | 7:30  | 4,433                            | 1.9    | 1.3    | 140            | 25.2                     | -                       |                             |                     |                         |                  |       |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/16/00  | 10:00 | 4,441                            | -      | -      | 140            | 8.9                      | -                       |                             |                     |                         |                  |       |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/23/00  | 7:30  | 4,443                            | -      | -      | 140            | 11.9                     | -                       |                             |                     |                         |                  |       |
| 11/30/00  | 7:30  | 4,611                            | 5.6    | 3.6    | 140            | 6.2                      | -                       |                             |                     |                         |                  |       |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 12/7/00   | 8:00  | 4,768                            | -      | -      | 140            | 14.4                     | -                       |                             |                     |                         |                  |       |
| 12/14/00  | 10:30 | 4,940                            | 2.3    | 1.5    | 140            | 1.2                      | 1.2                     | 0.00089                     | 0.0023              | 0.76                    | 1.2              | 4A    |
| System shut down on 12/14/00 for rebound test.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 1/4/01  | 9:45  | 4,940                            | 2.1    | 1.5    | 120            | 1.5                      | 1.3                     | -                           | -                   | -                       | -                |       |

# TABLE 4d

## ***Soil Vapor Extraction Data: Extraction Well SVE-3***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 2/19/01   | 15:45 | 4,940                            | 3.8    | 2.5    | 140            | 6.0                      | -                       |                             |                     |                         |                  |       |
| 2/22/01   | 17:00 | 5,016                            | 3.4    | 2.2    | 140            | 6.4                      | -                       |                             |                     |                         |                  |       |
| 3/1/01  | 12:45 | 5,180                            | 2.6    | 1.7    | 140            | 6.3                      | -                       |                             |                     |                         |                  |       |
| 3/8/01  | 7:30  | 5,343                            | 2.6    | 1.7    | 145            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/15/01   | 13:00 | 5,516                            | 2.6    | 1.7    | 145            | 0.5                      | -                       |                             |                     |                         |                  |       |
| 3/22/01   | 13:00 | 5,682                            | 2.6    | 1.7    | 145            | 3.3                      | -                       |                             |                     |                         |                  |       |
| 3/29/01   | 14:30 | 5,854                            | 2.7    | 1.7    | 140            | 8.3                      | -                       | -                           | -                   | -                       | -                |       |

### **NOTES:**

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:  
A: Mass removal calculated using an average of the previous and current mass removal rates.
5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-3. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well SVE-3 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

**TABLE 4e****Soil Vapor Extraction Data: Extraction Well SVE-D1**Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed<br>Time on<br>Hour<br>Meter<br>(hrs) | Flow   |        | Vacuum<br>(in-wc) | Total<br>VOCs<br>by PID<br>(ppmv) | TCE<br>Conc.<br>by Lab<br>(ppmv) | Estimated VOC<br>Removal Rates |                           | Cumulative Mass<br>Removal |                        |       |
|--|-------|--|--------|--------|-------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------|----------------------------|------------------------|-------|
|  |       |  | (acfm) | (scfm) |                   |                                   |                                  | TCE<br>(lb/day)                | Total<br>VOCs<br>(lb/day) | TCE<br>(lbs)               | Total<br>VOCs<br>(lbs) | Notes |
| Static vapor sample collected on 3/16/00.                                      |       |  |        |        |                   | 1,580                             | 1,000                            | 1.8                            | 1.9                       | 0                          | 0                      |       |
| 3/16/00  | 8:57  | 5.6  | 3.7    | 3.6    | 6.0               |                                   |                                  |                                |                           |                            |                        |       |
| System startup on 3/16/00 at 16:00.  |       |  |        |        |                   |                                   |                                  |                                |                           |                            |                        |       |
| 3/17/00  | 7:00  | 20.3   | 4.6    | 4.5    | 10                | 92                                | -                                |                                |                           |                            |                        |       |
| 3/18/00  | 6:30  | 44.7   | 5.3    | 5.2    | 10                | 131                               | -                                |                                |                           |                            |                        |       |
| System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.      |       |  |        |        |                   |                                   |                                  |                                |                           |                            |                        |       |
| 3/19/00  | 6:30  | 48   | 0.0    | 0.0    | 0.0               | 30                                | 0                                |                                |                           |                            |                        |       |
| 3/20/00  | 6:30  | 72   | 5.8    | 5.7    | 9.0               | 164                               | 0                                |                                |                           |                            |                        |       |
| 3/21/00  | 7:00  | 96   | 2.6    | 2.6    | 7.0               | 560                               | 0                                |                                |                           |                            |                        |       |
| 3/22/00  | 7:30  | 121  | 8.9    | 8.6    | 15                | 70                                | 440                              | 1.9                            | 2.0                       | 8.8                        | 9.1                    | 4A    |
| 3/30/00  | 11:00 | 316  | 24     | 22     | 38                | 36                                | 0                                |                                |                           |                            |                        |       |
| 4/6/00   | 11:00 | 483  | 25     | 17     | 125               | 30                                | 0                                |                                |                           |                            |                        |       |
| 4/13/00  | 8:00  | 648  | 33     | 21     | 150               | 33                                | 25                               | 0.26                           | 0.28                      | 32                         | 34                     | 4A    |
| 4/20/00  | 7:30  | 815  | 28     | 18     | 145               | 28                                | 0                                |                                |                           |                            |                        |       |
| 4/27/00  | 7:00  | 983  | 18     | 16     | 40                | 25                                | 0                                |                                |                           |                            |                        |       |
| 5/4/00   | 8:30  | 1,152  | 16     | 10     | 135               | 20                                | 0                                |                                |                           |                            |                        |       |
| 5/11/00  | 6:30  | 1,318  | 13     | 9.7    | 95                | 13                                | 0                                |                                |                           |                            |                        |       |
| 5/18/00  | 7:00  | 1,486  | 20     | 14     | 120               | 37                                | 8.6                              | 0.061                          | 0.070                     | 38                         | 40                     | 4A    |
|  |       |  | 26     | 17     | 150               | 37                                | -                                | 0.071                          | 0.081                     | -                          | -                      |       |
| 5/25/00  | 6:30  | 1,654  | 18     | 11     | 150               | 16                                | -                                |                                |                           |                            |                        |       |
| 6/1/00   | 6:30  | 1,822  | 16     | 10     | 150               | 31                                | -                                |                                |                           |                            |                        |       |
| 6/8/00   | 7:00  | 1,990  | 21     | 13     | 155               | 31                                | -                                |                                |                           |                            |                        |       |
| 6/15/00  | 7:30  | 2,158  | 21     | 13     | 150               | 31                                | -                                |                                |                           |                            |                        |       |
| System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00. |       |  |        |        |                   | 30                                | 92                               | -                              | -                         | -                          | -                      |       |
| 7/6/00   | 9:34  | 2,312  | 0      | 0      | 0                 |                                   |                                  |                                |                           |                            |                        |       |
| System restarted on 7/6/00 at 10:00.   |       |  |        |        |                   |                                   |                                  |                                |                           |                            |                        |       |
| 7/13/00  | 12:00 | 2,485  | 34     | 22     | 145               | 37                                | 5.1                              | 0.056                          | 0.25                      | 40                         | 47                     | 4A    |
| 7/20/00  | 7:30  | 2,648  | 32     | 20     | 150               | 27                                | -                                |                                |                           |                            |                        |       |
| System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.      |       |  |        |        |                   |                                   |                                  |                                |                           |                            |                        |       |
| 7/27/00  | 6:00  | 2,791  | 26     | 17     | 140               | 9.4                               | -                                |                                |                           |                            |                        |       |
| 8/3/00   | 8:00  | 2,961  | 26     | 17     | 140               | 1.5                               | -                                |                                |                           |                            |                        |       |
| 8/8/00   | 14:30 | 3,086  | 26     | 17     | 140               | 1.8                               | -                                |                                |                           |                            |                        |       |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.    |       |  |        |        |                   |                                   |                                  |                                |                           |                            |                        |       |

# TABLE 4e

## Soil Vapor Extraction Data: Extraction Well SVE-D1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| 8/24/00   | 12:30 | 3,226                            | 27     | 18     | 140            | 17                       | -                       |                             |                     |                         |                  |       |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/31/00   | 9:00  | 3,471                            | 21     | 15     | 120            | 8.9                      | -                       |                             |                     |                         |                  |       |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.                        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/7/00  | 10:30 | 3,621                            | 22     | 15     | 125            | 5.8                      | -                       |                             |                     |                         |                  |       |
| 9/14/00   | 9:00  | 3,788                            | 20     | 13     | 140            | 24                       | 4.0                     | 0.026                       | 0.23                | 43                      | 60               | 4A    |
| System shut down on 9/14/00 for rebound test. Static vapor sample collected on 9/28/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/28/00   | 10:25 | 3,788                            | 52     | 36     | 120            | 62                       | 120                     | -                           | -                   | -                       | -                |       |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/1/00   | 6:30  | 3,791                            | -      | -      | -              | -                        | -                       |                             |                     |                         |                  |       |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/5/00   | 7:30  | 3,795                            | 29     | 21     | 120            | 41                       | -                       |                             |                     |                         |                  |       |
| 10/12/00  | 8:00  | 3,964                            | 28     | 20     | 120            | 72                       | -                       |                             |                     |                         |                  |       |
| 10/19/00  | 8:00  | 4,132                            | 19     | 14     | 120            | 6.2                      | -                       |                             |                     |                         |                  |       |
| 10/26/00  | 8:00  | 4,301                            | 20     | 14     | 115            | 5.8                      | 2.4                     | 0.017                       | 0.081               | 43                      | 63               | 4A    |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/2/00   | 8:00  | 4,422                            | 22     | 15     | 140            | 1.5                      | -                       |                             |                     |                         |                  |       |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/9/00   | 7:30  | 4,433                            | 22     | 15     | 140            | 4.9                      | -                       |                             |                     |                         |                  |       |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/16/00  | 10:00 | 4,441                            | 24     | 15     | 140            | 38                       | -                       |                             |                     |                         |                  |       |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/23/00  | 7:30  | 4,443                            | 24     | 16     | 140            | 29                       | -                       |                             |                     |                         |                  |       |
| 11/30/00  | 7:30  | 4,611                            | -      | -      | 140            | 23                       | -                       |                             |                     |                         |                  |       |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 12/7/00   | 8:00  | 4,768                            | -      | -      | 140            | 12                       | -                       |                             |                     |                         |                  |       |
| 12/14/00  | 10:30 | 4,940                            | 16     | 11     | 140            | 3.1                      | 2.7                     | 0.014                       | 0.025               | 44                      | 64               | 4A    |
| System shut down on 12/14/00 for rebound test.  |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 1/4/01  | 10:48 | 4,940                            | 74     | 52     | 120            | 43                       | 41                      | -                           | -                   | -                       | -                |       |

# TABLE 4e

## ***Soil Vapor Extraction Data: Extraction Well SVE-D1***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |  |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|--|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |  |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |  |
| 2/19/01   | 15:45 | 4,940                            | 23     | 15     | 140            | 43                       | -                       |                             |                     |                         |                  |       |  |
| 2/22/01   | 17:00 | 5,016                            | 24     | 15     | 140            | 37                       | -                       |                             |                     |                         |                  |       |  |
| 3/1/01  | 12:45 | 5,180                            | 24     | 15     | 140            | 81                       | -                       |                             |                     |                         |                  |       |  |
| 3/8/01  | 7:30  | 5,343                            | 23     | 15     | 145            | 103                      | -                       |                             |                     |                         |                  |       |  |
| 3/15/01   | 13:00 | 5,516                            | 22     | 14     | 145            | 9.4                      | -                       |                             |                     |                         |                  |       |  |
| 3/22/01   | 13:00 | 5,682                            | 21     | 14     | 145            | 12                       | -                       |                             |                     |                         |                  |       |  |
| 3/29/01   | 14:30 | 5,854                            | 21     | 14     | 130            | 10                       | -                       | -                           | -                   | -                       | -                |       |  |

### NOTES:

TCE = trichloroethene

acfm = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- Cumulative mass removal amounts are calculated as follows:  
A: Mass removal calculated using an average of the previous and current mass removal rates.
- On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
- Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- Extraction well SVE-D1 is screened in the shallow vadose zone from 30 to 40 feet below ground surface.

# TABLE 4f

## Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| Static vapor sample collected on 3/16/00.   |       |                                  |        |        |                | 282                      | 460                     |                             |                     |                         |                  |       |
| 3/16/00   | 10:32 | 5.6                              | 0      | 0      | 0              | 282                      | 460                     |                             |                     |                         |                  |       |
| System startup on 3/16/00 at 16:00 with VMP-D1 used as a monitoring well.               |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 4/6/00  | 11:00 | 483                              | 0      | 0      | 0              | 3.5                      | -                       |                             |                     |                         |                  |       |
| 4/13/00   | 8:00  | 648                              | 0      | 0      | 0              | 23                       | -                       |                             |                     |                         |                  |       |
| System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.          |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/6/00  | 8:57  | 2,312                            | 35     | 24     | 130            | 30                       | 9.4                     | 0.11                        | 0.12                | 0                       | 0                |       |
| System restarted on 7/6/00 at 10:00 with VMP-D1 operating as an extraction well.        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/13/00   | 12:00 | 2,485                            | 33     | 21     | 145            | 3.6                      | 0                       |                             |                     |                         |                  |       |
| 7/20/00   | 7:30  | 2,648                            | 34     | 22     | 150            | 3.2                      | -                       |                             |                     |                         |                  |       |
| 7/27/00   | 6:00  | 2,791                            | 26     | 17     | 140            | 9.4                      | -                       |                             |                     |                         |                  |       |
| 8/3/00  | 8:00  | 2,961                            | 25     | 16     | 140            | 1.5                      | -                       |                             |                     |                         |                  |       |
| 8/8/00  | 14:30 | 3,086                            | 24     | 16     | 140            | 1.6                      | -                       |                             |                     |                         |                  |       |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.             |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/24/00   | 12:30 | 3,326                            | 22     | 15     | 140            | 2.1                      | -                       |                             |                     |                         |                  |       |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/31/00   | 9:00  | 3,471                            | 19     | 14     | 120            | 0.9                      | -                       |                             |                     |                         |                  |       |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.                        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/7/00  | 10:30 | 3,621                            | 20     | 14     | 125            | 0.2                      | -                       |                             |                     |                         |                  |       |
| 9/14/00   | 9:00  | 3,788                            | 20     | -      | 140            | 1.2                      | 1.4                     | 0.0090                      | 0.012               | 3.7                     | 4.2              | 4A    |
| System shut down on 9/14/00 for rebound test. Static vapor sample collected on 9/28/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/28/00   | 10:08 | 3,788                            | 59     | 41     | 120            | 6.3                      | 8.6                     | -                           | -                   | -                       | -                |       |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/1/00   | 6:30  | 3,791                            | -      | -      | -              | -                        | -                       |                             |                     |                         |                  |       |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/5/00   | 7:30  | 3,795                            | 25     | 18     | 120            | 8.4                      | -                       |                             |                     |                         |                  |       |
| 10/12/00  | 8:00  | 3,964                            | 24     | 17     | 120            | 6.7                      | -                       |                             |                     |                         |                  |       |
| 10/19/00  | 8:00  | 4,132                            | 25     | 17     | 120            | 9.4                      | -                       |                             |                     |                         |                  |       |
| 10/26/00  | 8:00  | 4,301                            | 22     | 16     | 115            | 24                       | -                       |                             |                     |                         |                  |       |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |

**TABLE 4f**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D1**

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|--|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|  |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| 11/2/00  | 8:00  | 4,422                            | 26     | 17     | 140            | 0                        | -                       |                             |                     |                         |                  |       |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/9/00  | 7:30  | 4,433                            | -      | -      | 140            | 59                       | -                       |                             |                     |                         |                  |       |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/16/00   | 10:00 | 4,441                            | 64     | 42     | 140            | 8.6                      | -                       |                             |                     |                         |                  |       |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/23/00   | 7:30  | 4,443                            | 60     | 40     | 140            | 87.4                     | -                       |                             |                     |                         |                  |       |
| 11/30/00   | 7:30  | 4,611                            | 39     | 26     | 140            | 27.9                     | -                       |                             |                     |                         |                  |       |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 12/7/00  | 8:00  | 4,768                            | 42     | 27     | 140            | 29.3                     | -                       |                             |                     |                         |                  |       |
| 12/14/00   | 10:30 | 4,940                            | 15     | 10     | 140            | 0.3                      | 0.95                    | 0.0047                      | 0.0065              | 4.0                     | 4.6              | 4A    |
| System shut down on 12/14/00 for rebound test.                               |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 1/4/01   | 9:57  | 4,940                            | 76     | 53     | 120            | 0.6                      | 1.6                     | -                           | -                   | -                       | -                |       |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 2/19/01  | 15:45 | 4,940                            | 22     | 15     | 140            | 1.2                      | -                       |                             |                     |                         |                  |       |
| 2/22/01  | 17:00 | 5,016                            | 23     | 15     | 140            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/1/01   | 12:45 | 5,180                            | 18     | 12     | 140            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/8/01   | 7:30  | 5,343                            | 19     | 12     | 145            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/15/01  | 13:00 | 5,516                            | 18     | 12     | 145            | 0.8                      | -                       |                             |                     |                         |                  |       |
| 3/22/01  | 13:00 | 5,682                            | 19     | 12     | 145            | 0.2                      | -                       |                             |                     |                         |                  |       |
| 3/29/01  | 14:30 | 5,854                            | 19     | 13     | 140            | 0.6                      | -                       |                             |                     |                         |                  |       |

# TABLE 4f

## ***Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D1***

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date | Time | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|------|------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|      |      |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |

### **NOTES:**

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- Cumulative mass removal amounts are calculated as follows:
  - Mass removal calculated using an average of the previous and current mass removal rates.
- Well VMP-D1 was first used as an extraction well on 6 July 2000.
- Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- Extraction well VMP-D1 is screened in the deep vadose zone from 30 to 40 feet below ground surface.



**TABLE 4g**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D2**

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date  | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|---|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|   |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| Static vapor sample collected on 3/16/00.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/16/00   | 10:50 | 5.6                              | 0      | 0      | 0              | 76                       | 39                      |                             |                     |                         |                  |       |
| System startup on 3/16/00 at 16:00 with VMP-D2 used as a monitoring well.               |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 4/6/00  | 11:00 | 483                              | 0      | 0      | 0              | 150                      | -                       |                             |                     |                         |                  |       |
| 4/13/00   | 8:00  | 648                              | 0      | 0      | 0              | 27                       | -                       |                             |                     |                         |                  |       |
| System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.          |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/6/00  | 9:12  | 2,312                            | 44     | 30     | 130            | 5.2                      | 5.7                     | 0.085                       | 0.10                | 0                       | 0                |       |
| System restarted on 7/6/00 at 10:00 with VMP-D2 operating as an extraction well.        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/13/00   | 12:00 | 2,485                            | 41     | 26     | 145            | 5.8                      | -                       |                             |                     |                         |                  |       |
| 7/20/00   | 7:30  | 2,648                            | 42     | 27     | 150            | 3.8                      | -                       |                             |                     |                         |                  |       |
| 7/27/00   | 6:00  | 2,791                            | 21     | 14     | 140            | 8.7                      | -                       |                             |                     |                         |                  |       |
| 8/3/00  | 8:00  | 2,961                            | 21     | 14     | 140            | 4.8                      | -                       |                             |                     |                         |                  |       |
| 8/8/00  | 14:30 | 3,086                            | 22     | 14     | 140            | 4.3                      | -                       |                             |                     |                         |                  |       |
| System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.             |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/24/00   | 12:30 | 3,326                            | 26     | 17     | 140            | 8.8                      | -                       |                             |                     |                         |                  |       |
| System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 8/31/00   | 9:00  | 3,471                            | 18     | 13     | 120            | 1.5                      | -                       |                             |                     |                         |                  |       |
| System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.                        |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/7/00  | 10:30 | 3,621                            | 17     | 12     | 125            | 0.6                      | -                       |                             |                     |                         |                  |       |
| 9/14/00   | 9:00  | 3,788                            | 17     | 11     | 140            | 9.6                      | 0.71                    | 0.0040                      | 0.038               | 2.8                     | 4.4              | 4A    |
| System shut down on 9/14/00 for rebound test. Static vapor sample collected on 9/28/00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/28/00   | 9:35  | 3,788                            | 42     | 29     | 125            | 39                       | 9.3                     | -                           | -                   | -                       | -                |       |
| System shut down on 9/28/00 at 12:00. System restarted on 10/1/00 at 6:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/1/00   | 6:30  | 3,791                            | -      | -      | -              | -                        | -                       |                             |                     |                         |                  |       |
| System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 10/5/00   | 7:30  | 3,795                            | 23     | 16     | 120            | 24                       | -                       |                             |                     |                         |                  |       |
| 10/12/00  | 8:00  | 3,964                            | 26     | 18     | 120            | 9.1                      | -                       |                             |                     |                         |                  |       |
| 10/19/00  | 8:00  | 4,132                            | 25     | 18     | 120            | 10                       | -                       |                             |                     |                         |                  |       |
| 10/26/00  | 8:00  | 4,301                            | 19     | 14     | 115            | 26                       | -                       |                             |                     |                         |                  |       |
| System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.              |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |

**TABLE 4g**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D2**

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|--|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|  |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| 11/2/00  | 8:00  | 4,422                            | 23     | 15     | 140            | 0                        | -                       |                             |                     |                         |                  |       |
| System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/9/00  | 7:30  | 4,433                            | -      | -      | 140            | 14                       | -                       |                             |                     |                         |                  |       |
| System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/16/00   | 10:00 | 4,441                            | -      | -      | 140            | 15                       | -                       |                             |                     |                         |                  |       |
| System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 11/23/00   | 7:30  | 4,443                            | 47     | 31     | 140            | 63                       | -                       |                             |                     |                         |                  |       |
| 11/30/00   | 7:30  | 4,611                            | 28     | 18     | 140            | 45                       | -                       |                             |                     |                         |                  |       |
| System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.   |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 12/7/00  | 8:00  | 4,768                            | 11     | 7.4    | 140            | 40                       | -                       |                             |                     |                         |                  |       |
| 12/14/00   | 10:30 | 4,940                            | 18     | 12     | 140            | 14                       | 1.3                     | 0.0078                      | 0.091               | 3.0                     | 7.5              | 4A    |
| System shut down on 12/14/00 for rebound test.                               |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 1/4/01   | 9:57  | 4,940                            | 78     | 55     | 120            | 3.4                      | 3.0                     | -                           | -                   | -                       | -                |       |
| System shut down on 1/4/01. System restarted on 2/19/01 at 15:45.            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 2/19/01  | 15:45 | 4,940                            | 21     | 14     | 140            | 73.4                     | -                       |                             |                     |                         |                  |       |
| 2/22/01  | 17:00 | 5,016                            | 21     | 14     | 140            | 81.9                     | -                       |                             |                     |                         |                  |       |
| 3/1/01   | 12:45 | 5,180                            | 20     | 13     | 140            | 185.4                    | -                       |                             |                     |                         |                  |       |
| 3/8/01   | 7:30  | 5,343                            | 22     | 14     | 145            | 153.3                    | -                       |                             |                     |                         |                  |       |
| 3/15/01  | 13:00 | 5,516                            | 24     | 15     | 145            | 5.2                      | -                       |                             |                     |                         |                  |       |
| 3/22/01  | 13:00 | 5,682                            | 15     | 10     | 145            | 3.2                      | -                       |                             |                     |                         |                  |       |
| 3/29/01  | 14:30 | 5,854                            | 19     | 13     | 140            | 2.6                      | -                       |                             |                     |                         |                  |       |

# TABLE 4g

## Soil Vapor Extraction Data: Monitoring/Extraction Well VMP-D2

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date | Time | Elapsed<br>Time on<br>Hour<br>Meter<br>(hrs) | Flow   |        | Vacuum<br>(in-wc) | Total<br>VOCs<br>by PID<br>(ppmv) | TCE<br>Conc.<br>by Lab<br>(ppmv) | Estimated VOC<br>Removal Rates |                           | Cumulative Mass<br>Removal |                        |       |
|------|------|--|--------|--------|-------------------|-----------------------------------|----------------------------------|--------------------------------|---------------------------|----------------------------|------------------------|-------|
|      |      |  | (acfm) | (scfm) |                   |                                   |                                  | TCE<br>(lb/day)                | Total<br>VOCs<br>(lb/day) | TCE<br>(lbs)               | Total<br>VOCs<br>(lbs) | Notes |

### NOTES:

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

- PID calibrated with 100 ppmv of isobutylene.
- Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
- Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
- Cumulative mass removal amounts are calculated as follows:  
A: Mass removal calculated using an average of the previous and current mass removal rates.
- Well VMP-D1 was first used as an extraction well on 6 July 2000.
- Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
- Extraction well VMP-D2 is screened in the deep vadose zone from 30 to 40 feet below ground surface.

**TABLE 4h**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-1**

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date   | Time  | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|--|-------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|  |       |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |
| Static vapor sample collected on 3/16/00.                                |       |                                  |        |        |                | 65                       | 29                      | -                           | -                   | -                       | -                |       |
| 3/16/00  | 11:35 | 5.6                              | 0      | 0      | 0              |                          |                         |                             |                     |                         |                  |       |
| System startup on 3/16/00 at 16:00 with VMP-1 used as a monitoring well. |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 4/6/00   | 11:00 | 483.0                            | 0      | 0      | 0              | 6.4                      | -                       |                             |                     |                         |                  |       |
| 4/13/00  | 8:00  | 648.0                            | 0      | 0      | 0              | 8.2                      | -                       |                             |                     |                         |                  |       |
| Static vapor sample collected on 7/6/00.                                 |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 7/6/00   | 8:06  | 2,312.0                          | 0      | 0      | 0              | 0.0                      | 0.13                    | -                           | -                   | -                       | -                |       |
| Vapor sample collected on 9/14/00.                                       |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/14/00  | 11:08 | 3,788.0                          | 0      | 0      | 0              | 0.5                      | 0.29                    | -                           | -                   | -                       | -                |       |
| Static vapor sample collected on 9/28/00.                                |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 9/28/00  | 8:51  | 3,788.0                          | 0      | 0      | 0              | 1.3                      | 0.47                    | -                           | -                   | -                       | -                |       |
| 10/26/00   | 8:00  | 4,301.0                          | 0      | 0      | 0              | 13                       | -                       |                             |                     |                         |                  |       |
| Static vapor sample collected on 1/4/01.                                 |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 1/4/01   | 9:15  | 4,940.0                          | 0      | 0      | 0              | 0.9                      | 0.93                    | -                           | -                   | -                       | -                |       |
| VMP-1 converted to extraction well on 3/8/01.                            |       |                                  |        |        |                |                          |                         |                             |                     |                         |                  |       |
| 3/8/01   | 7:30  | 5,343.0                          | -      | -      | 145            | 6.4                      | -                       |                             |                     |                         |                  |       |
| 2/22/01  | 17:00 | 5,016                            | 23     | 15     | 140            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/1/01   | 12:45 | 5,180                            | 18     | 12     | 140            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/8/01   | 7:30  | 5,343                            | 19     | 12     | 145            | 0.0                      | -                       |                             |                     |                         |                  |       |
| 3/15/01  | 13:00 | 5,516                            | 18     | 12     | 145            | 0.8                      | -                       |                             |                     |                         |                  |       |
| 3/22/01  | 13:00 | 5,682                            | 19     | 12     | 145            | 0.2                      | -                       |                             |                     |                         |                  |       |
| 3/29/01  | 14:30 | 5,854                            | 19     | 13     | 140            | 0.6                      | -                       |                             |                     |                         |                  |       |

**TABLE 4h**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-1**

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date | Time | Elapsed Time on Hour Meter (hrs) | Flow   |        | Vacuum (in-wc) | Total VOCs by PID (ppmv) | TCE Conc. by Lab (ppmv) | Estimated VOC Removal Rates |                     | Cumulative Mass Removal |                  |       |
|------|------|----------------------------------|--------|--------|----------------|--------------------------|-------------------------|-----------------------------|---------------------|-------------------------|------------------|-------|
|      |      |                                  | (acfm) | (scfm) |                |                          |                         | TCE (lb/day)                | Total VOCs (lb/day) | TCE (lbs)               | Total VOCs (lbs) | Notes |

**NOTES:**

TCE = trichloroethene  
acfm = actual cubic feet per minute  
°F = degrees Fahrenheit  
hrs = hours  
in-wc = inches of water column  
lb/day = pounds per day  
lbs = pounds

PID = photoionization detector  
ppmv = parts per million by volume  
scfm = standard cubic feet per minute  
tr = trace (concentration detected at less than reporting limit)  
VOCs = volatile organic compounds  
- = no measurement  
< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Well VMP-1 was first used as an extraction well on 8 March 2001.
4. Extraction well VMP-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

# TABLE 5

## *Field Data for Soil Vapor Monitoring Probes*

Quarterly Progress Report for January through March 2001

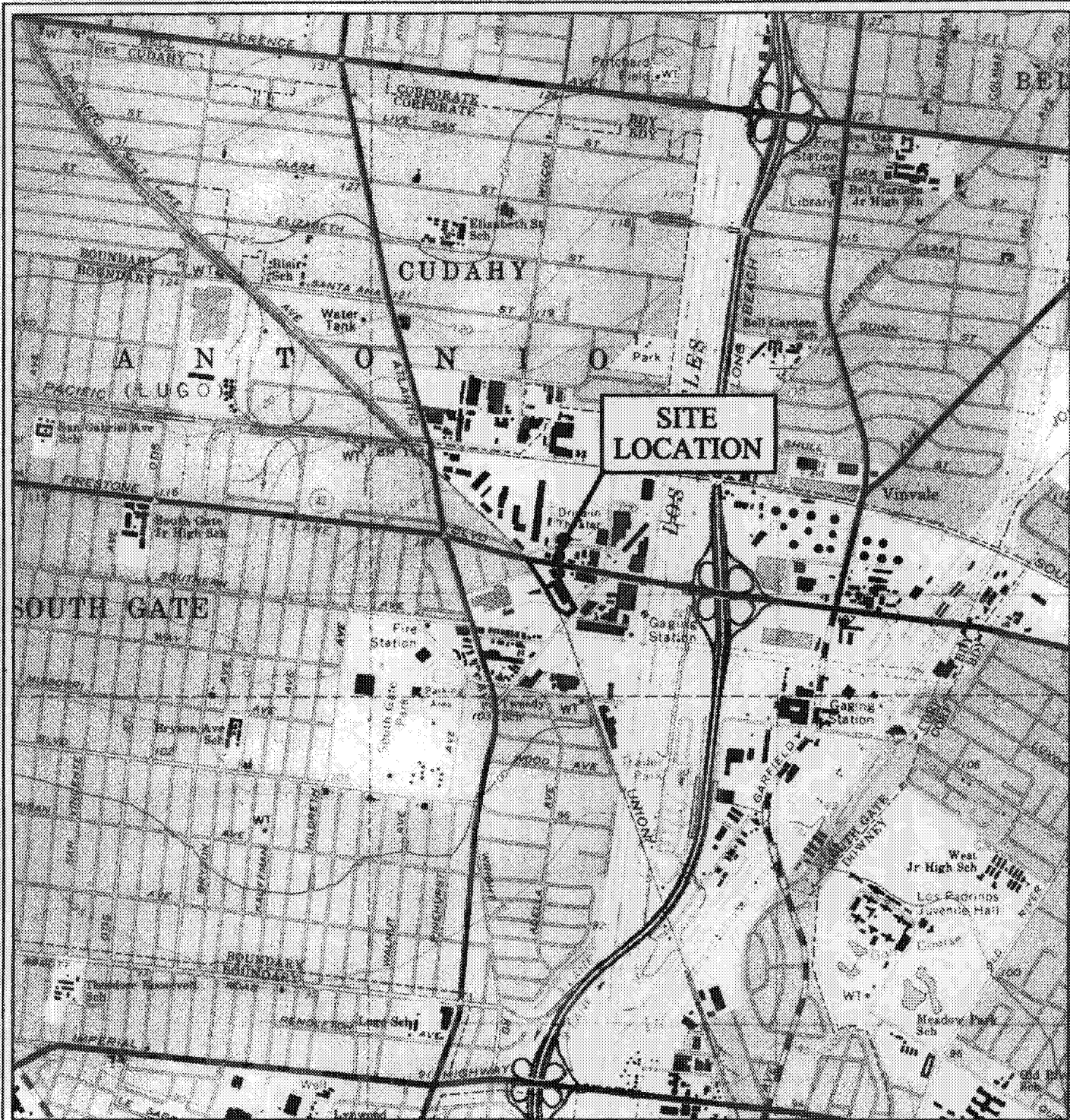
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

| Date     | VMP-1             |   | VMP-2             |   | VMP-D1            |   | VMP-D2            |   |
|----------|-------------------|---|-------------------|---|-------------------|---|-------------------|---|
|          | Vacuum<br>(in-wc) | Total VOCs<br>by PID <sup>(1,2)</sup><br>(ppmv) | Vacuum<br>(in-wc) | Total VOCs<br>by PID <sup>(1,2)</sup><br>(ppmv) | Vacuum<br>(in-wc) | Total VOCs<br>by PID <sup>(1,3)</sup><br>(ppmv) | Vacuum<br>(in-wc) | Total VOCs<br>by PID <sup>(1,3)</sup><br>(ppmv) |
| 3/16/00  | -                 | 68  | -                 | 150   | -                 | 530   | -                 | 71  |
| 3/17/00  | 1.8               | -   | 1.0               | -   | 4.7               | -   | 5.2               | -   |
| 3/18/00  | 1.3               | -   | 1.1               | -   | 6.6               | -   | 6.0               | -   |
| 3/19/00  | 1.1               | -   | 0.7               | -   | 2.2               | -   | 2.4               | -   |
| 3/20/00  | 2.1               | -   | 1.4               | -   | 2.6               | -   | 3.5               | -   |
| 3/21/00  | 2.4               | -   | 2.2               | -   | 5.4               | -   | 6.8               | -   |
| 3/22/00  | 2.6               | -   | 2.3               | -   | 5.8               | -   | 4.5               | -   |
| 3/30/00  | 1.8               | -   | 1.8               | -   | 15                | -   | 16                | -   |
| 4/6/00   | 2.8               | 6.4   | 4.2               | 7.4   | 23                | 3.5   | 24                | 150   |
| 4/13/00  | 4.0               | 8.2   | 2.5               | 6.2   | 21                | 23  | 22                | 27  |
| 5/11/00  | 4.5               | -   | 4.0               | -   | 19                | -   | 16                | -   |
| 5/18/00  | 3.2               | -   | 3.4               | -   | 17                | -   | 18                | -   |
|          | 3.8               | -   | 2.7               | -   | 21                | -   | 22                | -   |
| 7/6/00   | -                 | 0.0   | -                 | 2.6   | -                 | -   | -                 | -   |
| 7/13/00  | 2.6               | -   | 1.9               | -   | -                 | -   | -                 | -   |
| 7/20/00  | 2.9               | -   | 2.1               | -   | -                 | -   | -                 | -   |
| 7/27/00  | 2.6               | -   | 1.9               | -   | -                 | -   | -                 | -   |
| 9/14/00  | 5.2               | 0.5   | 2.4               | 0.7   | -                 | -   | -                 | -   |
| 9/28/00  | -                 | 1.3   | -                 | 2.4   | -                 | -   | -                 | -   |
| 10/26/00 | 11.5              | 13.2  | 11.5              | 2.2   | -                 | -   | -                 | -   |
| 12/14/00 | 7.3               | -   | 0.6               | -   | -                 | -   | -                 | -   |
| 1/4/01   | -                 | 0.9   | -                 | 0.4   | -                 | -   | -                 | -   |

**NOTES:** in-wc = inches of water column  
PID = photoionization detector  
ppmv = parts per million by volume

VOCs = volatile organic compounds  
- = no measurement

1. PID calibrated with 100 ppmv of isobutylene.
2. Each shallow vapor monitoring probe was purged of approximately 5 to 7 cubic feet of vapor and then sampled and analyzed using a PID.
3. Each deep vapor monitoring probe was purged of approximately 50 to 65 cubic feet of vapor and then sampled and analyzed using a PID.
4. On days for which two vacuum and PID readings are provided, the values indicate initial and final readings during the site visit.
5. Probes VMP-D1 and VMP-D2 have been used as extraction wells since 6 July 2000.  
For data collected at wells VMP-D1 and VMP-D2, see Tables 4f and 4g, respectively.
6. Probe VMP-1 has been used as an extraction well since 8 March 2001 (see Table 4h).
7. Soil vapor monitoring probes VMP-1 and VMP-2 are screened in the shallow vadose zone from approximately 19 to 25 feet beneath the ground surface.
8. Soil vapor monitoring probes VMP-D1 and VMP-D2 are screened in the deep vadose zone from approximately 30 to 40 and 31 to 41 feet beneath the ground surface, respectively.



0 2,000 4,000  
 (Approximate Scale in Feet)

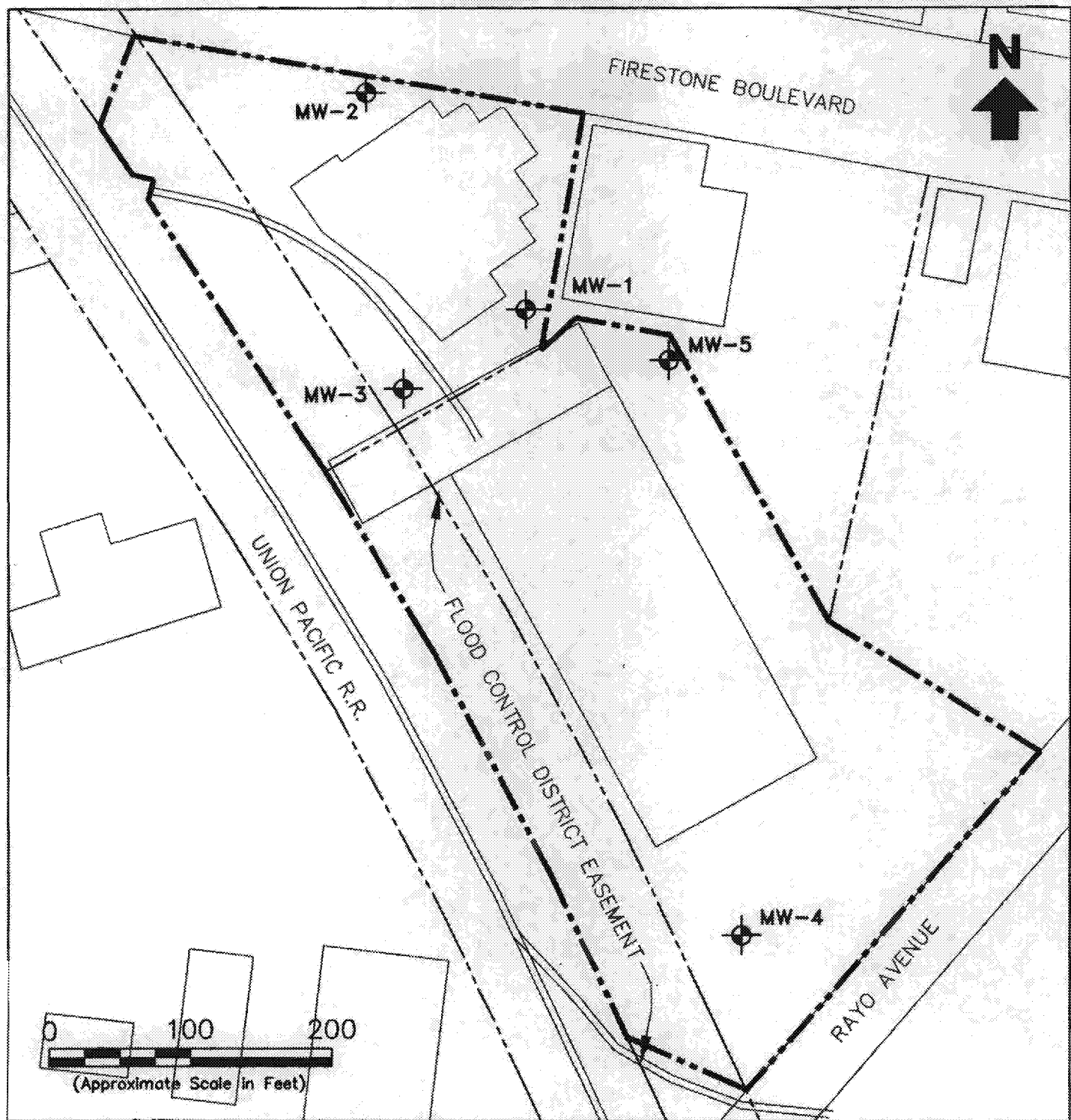
**Erler &  
 Kallnowski, Inc.**

Site Location Map



Source: U.S.G.S 7.5 Minute Series "South Gate"  
 Quadrangle, 1964, photorevised 1981.

Jervis B. Webb Company of California  
 South Gate, California  
 April 2001  
 EKI 991103.01  
 Figure 1





### LEGEND

-  Groundwater Monitoring Well
-  Property Line/Site Boundary

### Notes:

1. All locations are approximate.

**Erler &  
Kallnowski, Inc.**

Groundwater Monitoring  
Well Locations

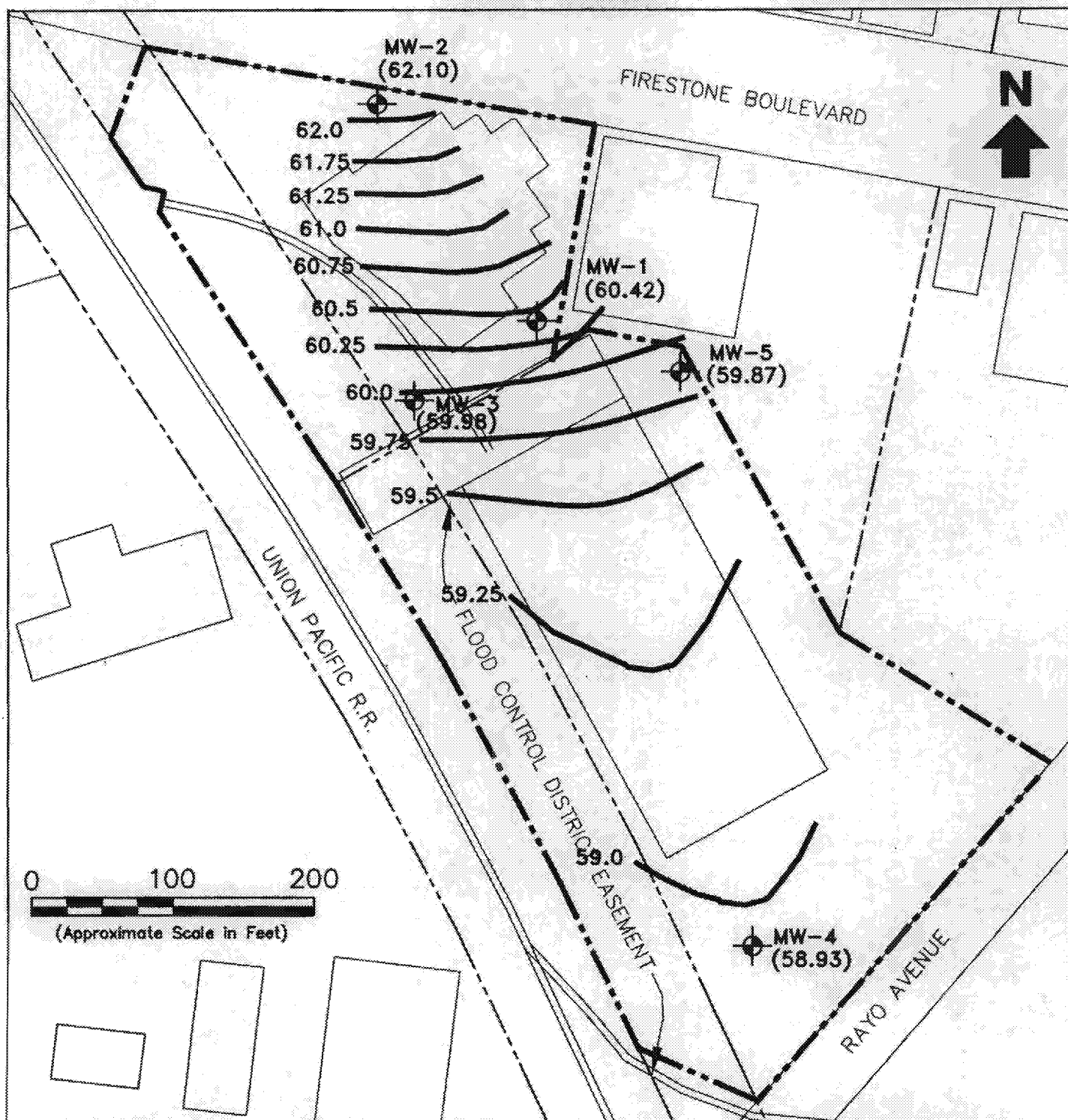
Jervis B. Webb Company of California  
South Gate, California

April 2001

EKI 991103.01

Figure 2





### LEGEND

- 62.0 — Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
- ⊕ MW-3 (59.98) Groundwater Monitoring Well with Groundwater Elevation (msl)
- Property Line/Site Boundary

### Notes:

1. All locations are approximate.
2. NR = Not Recorded

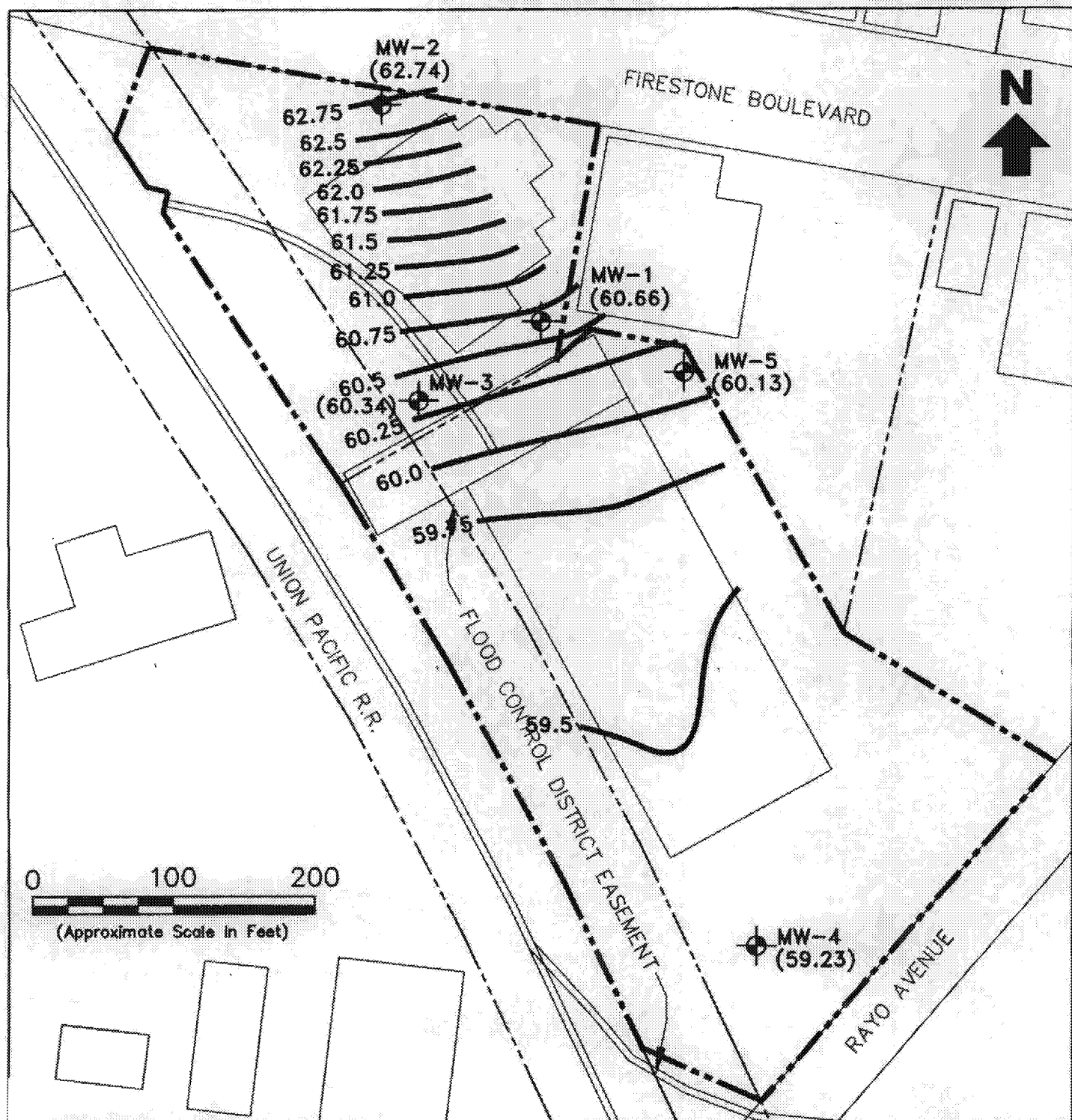
**Erler &  
Kalinowski, Inc.**

Elevation of the Groundwater  
Table on 4 January 2001

Jervis B. Webb Company of California  
South Gate, California

April 2001  
EKI 991103.01

Figure 3



# **LEGEND**

- 62.0 — Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
- ⊕ MW-3 (60.34) Groundwater Monitoring Well with Groundwater Elevation (msl)
- Property Line/Site Boundary

## **Notes:**

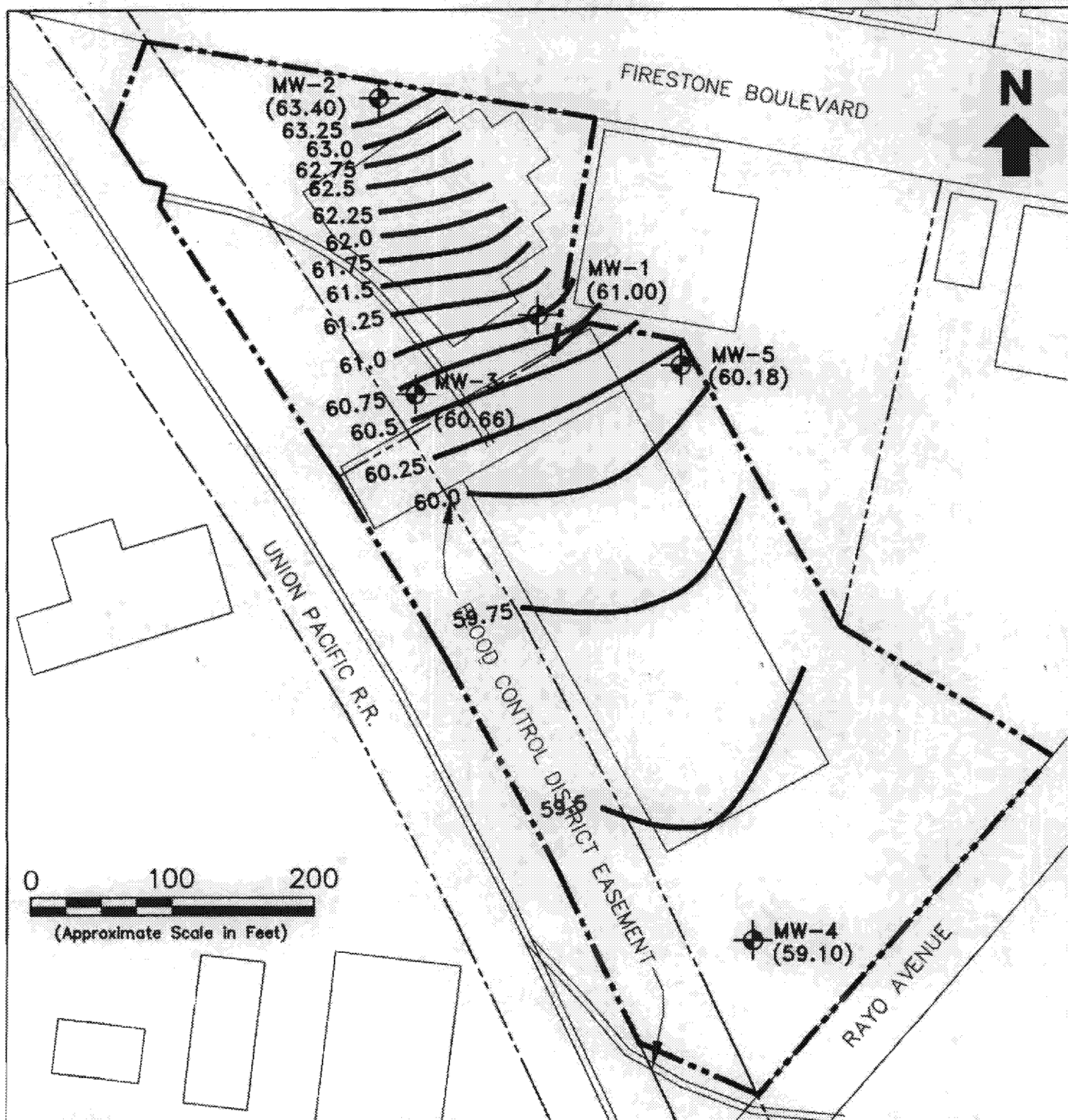
1. All locations are approximate.
2. NR = Not Recorded

**Erler &  
Kallnowski, Inc.**

**Elevation of the Groundwater  
Table on 22 February 2001**

Jervis B. Webb Company of California  
South Gate, California  
April 2001  
EKI 991103.01

**Figure 4**



# **LEGEND**

62.0

Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)

MW-3 (60.66)

Groundwater Monitoring Well with Groundwater Elevation (msl)

-----

Property Line/Site Boundary

## **Notes:**

1. All locations are approximate.
2. NR = Not Recorded

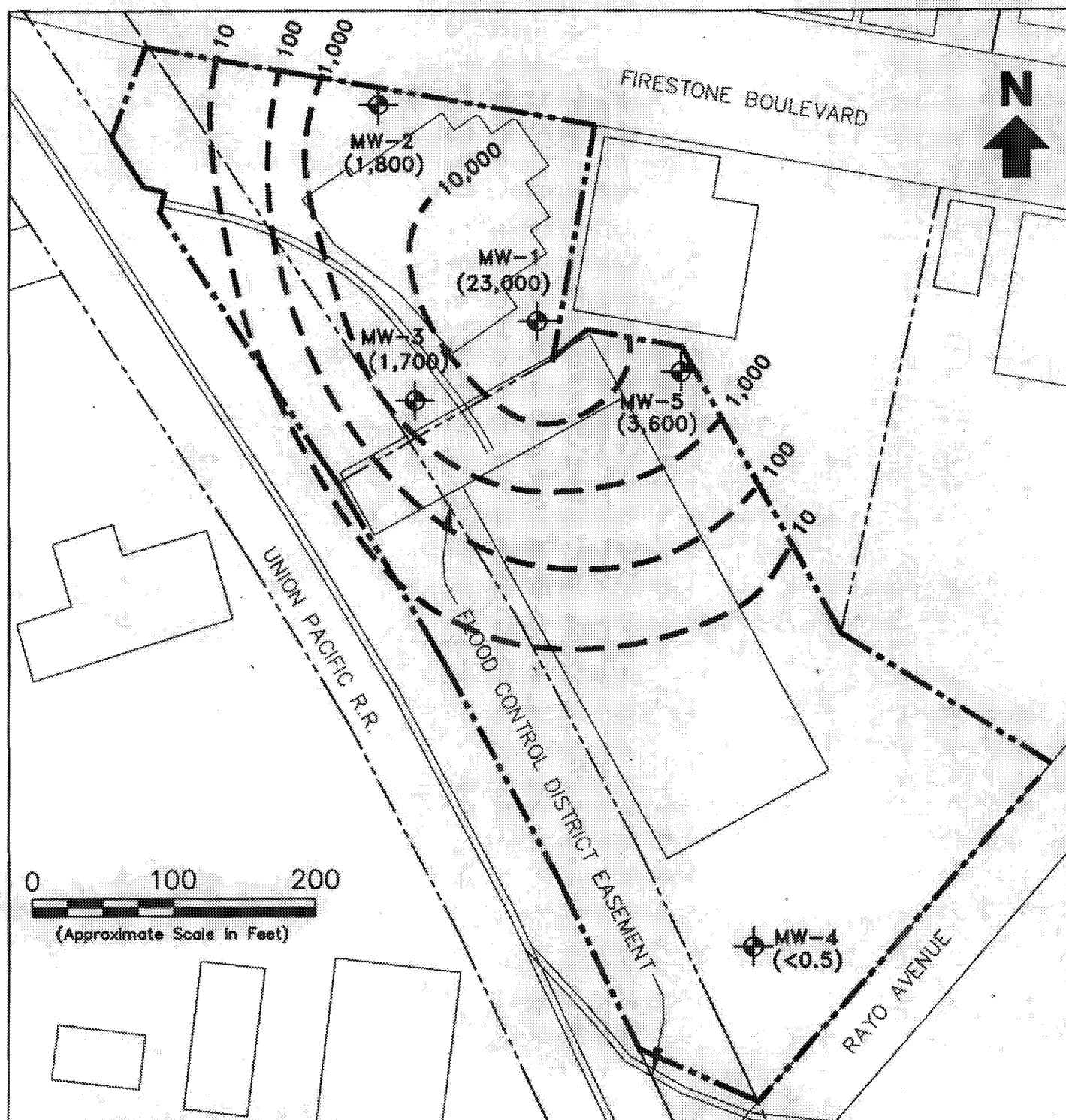
**Erler & Kallnowski, Inc.**

Elevation of the Groundwater Table on 8 March 2001

Jervis B. Webb Company of California  
South Gate, California

April 2001  
EKI 991103.01

Figure 5



### LEGEND

- 1,000 — Isoconcentration Contour for Trichloroethene (Micrograms per Liter)
- MW-3 — Groundwater Monitoring Well
- — — — — Property Line/Site Boundary

### Notes:

1. All locations are approximate.
2. Concentrations shown in units of micrograms per liter.

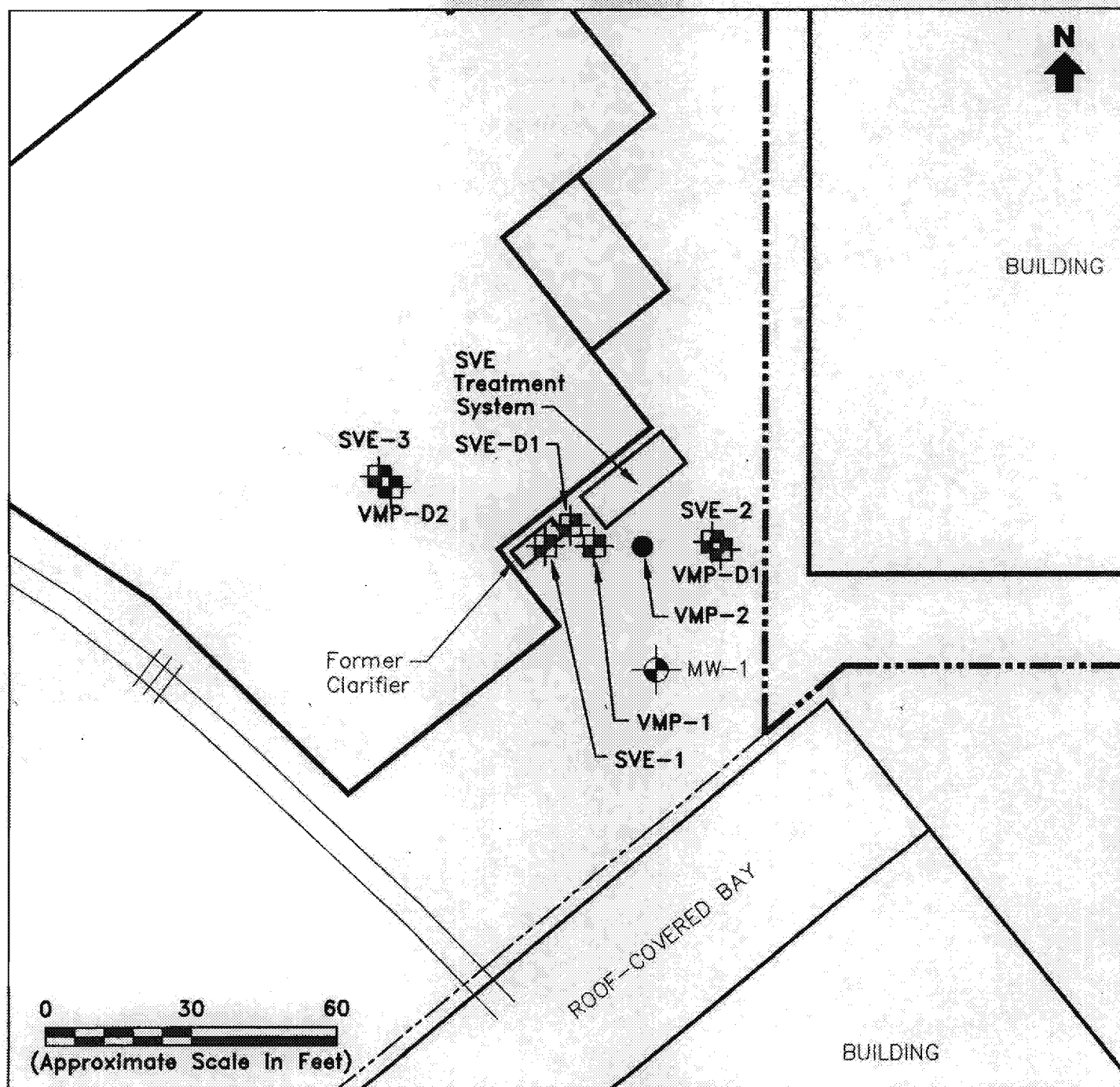
**Erler &  
Kallnowski, Inc.**

**Concentrations of Trichloroethene  
Detected in Groundwater Samples**





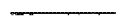
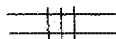
Jervis B. Webb Company of California  
South Gate, California

April 2001  
EKI 991103.01

**Figure 6**



#### LEGEND

-  Location of Soil Vapor Extraction Wells
-  Location of Vapor Monitoring Probe
-  Location of Groundwater Monitoring Well
-  Property Line/Site Boundary
-  Building
-  Railroad Spur

#### Notes:

1. All locations are approximate.
2. SVE = Soil Vapor Extraction

**Erler &  
Kalinowski, Inc.**

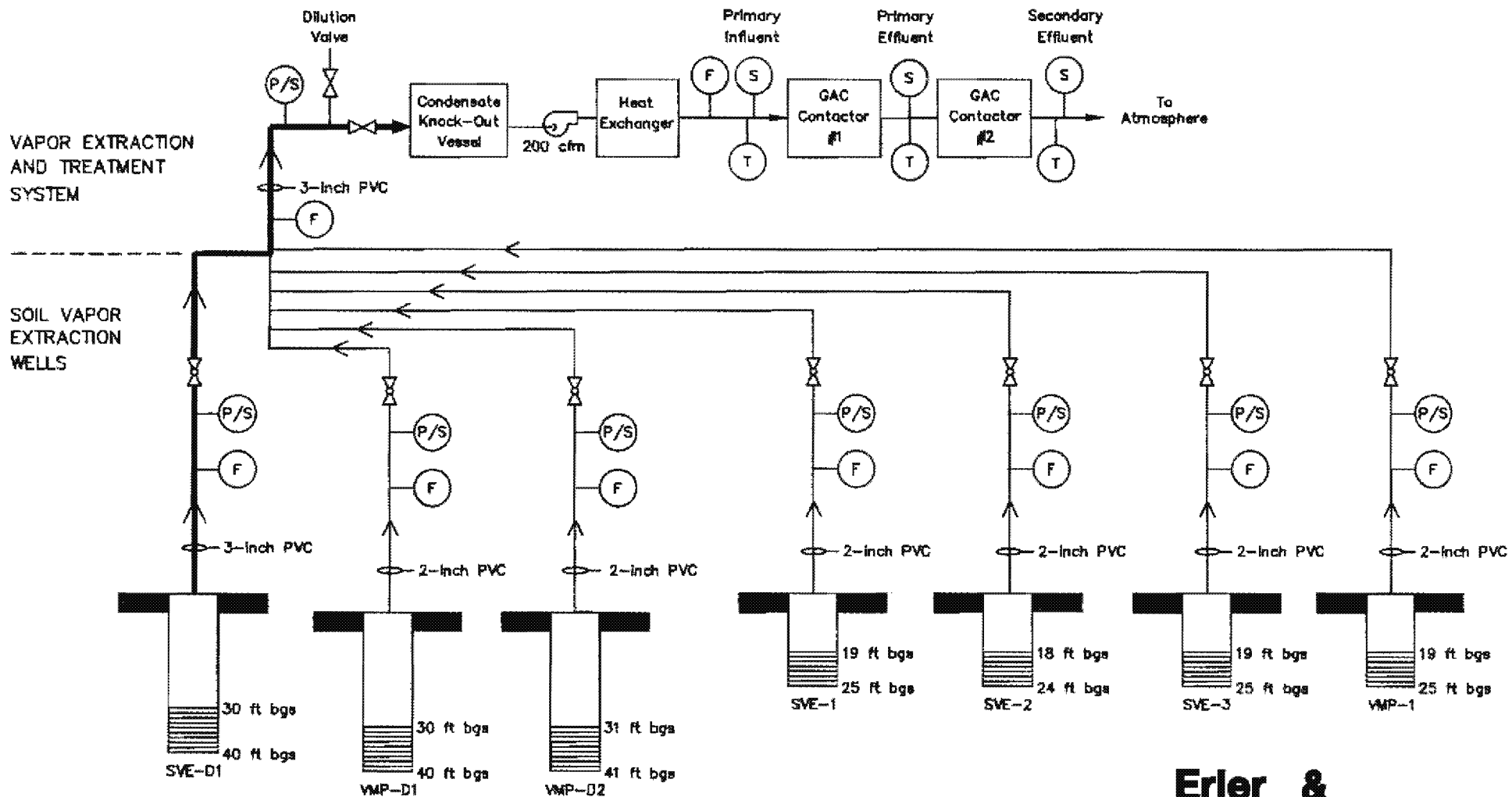
**Layout of the Soil Vapor  
Extraction System**

Jervis B. Webb Company of California  
South Gate, California

April 2001

EKI 991103.01

**Figure 7**



**Erler &  
Kallnowski, Inc.**

**Soil Vapor Extraction  
System Schematic**

Jervis B. Webb Company of California  
South Gate, California

April 2001  
EKI 991103.01

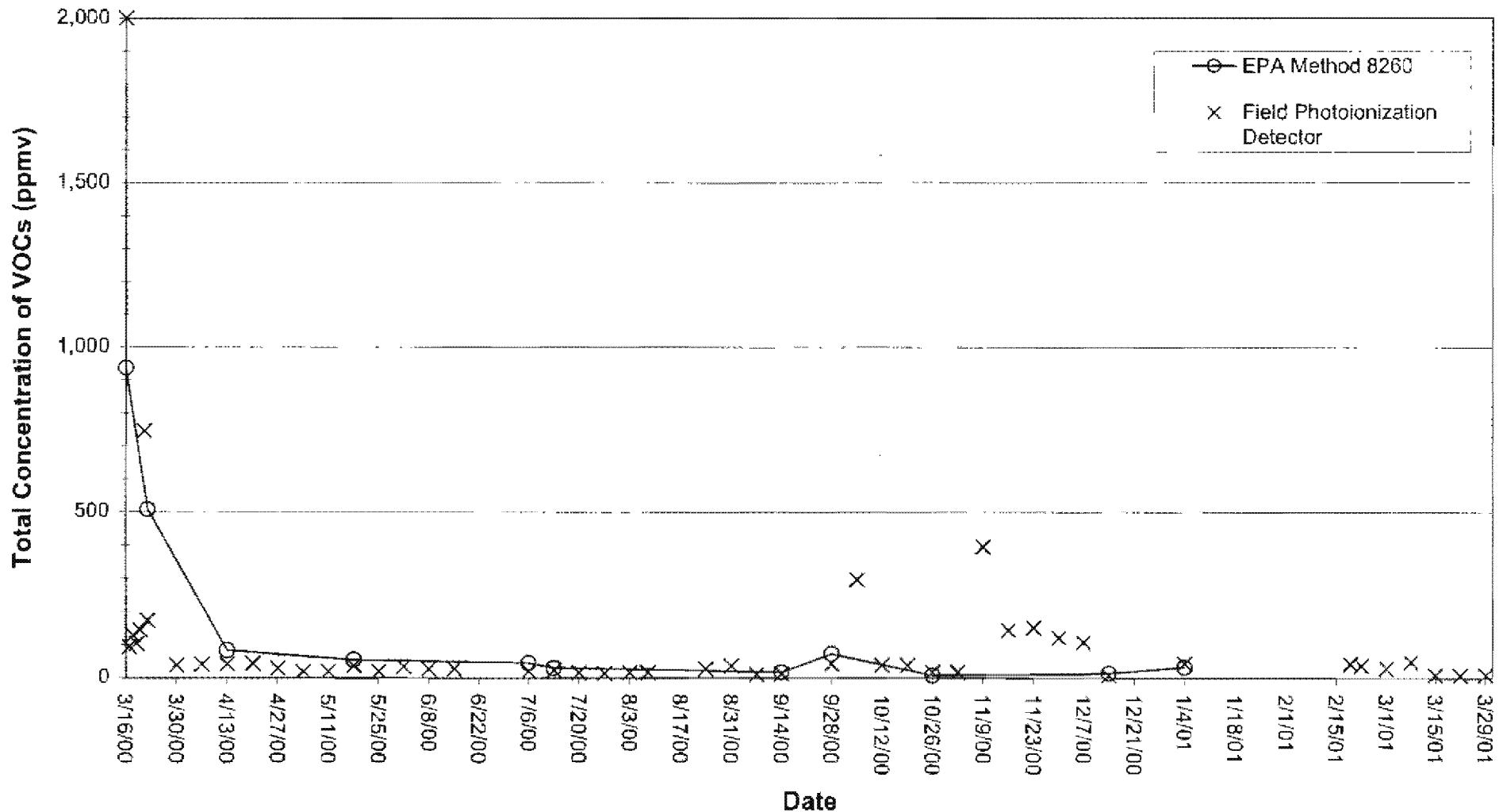
**Figure 8**

# FIGURE 9a

## Concentrations of Total VOCs versus Time: Blower Influent

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



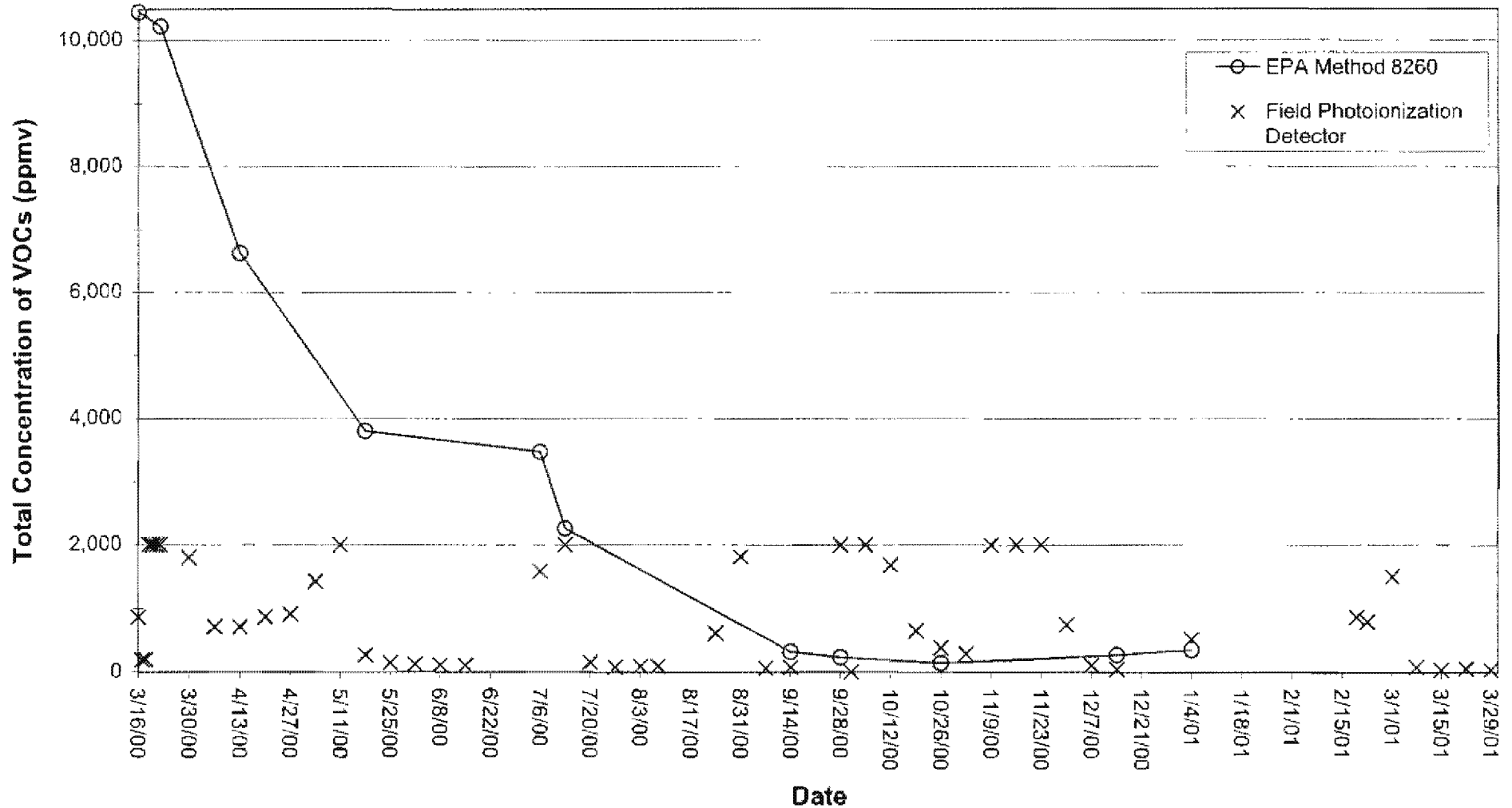
# FIGURE 9b

## Total Concentrations of VOCs versus Time :

### Extraction Well SVE-1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



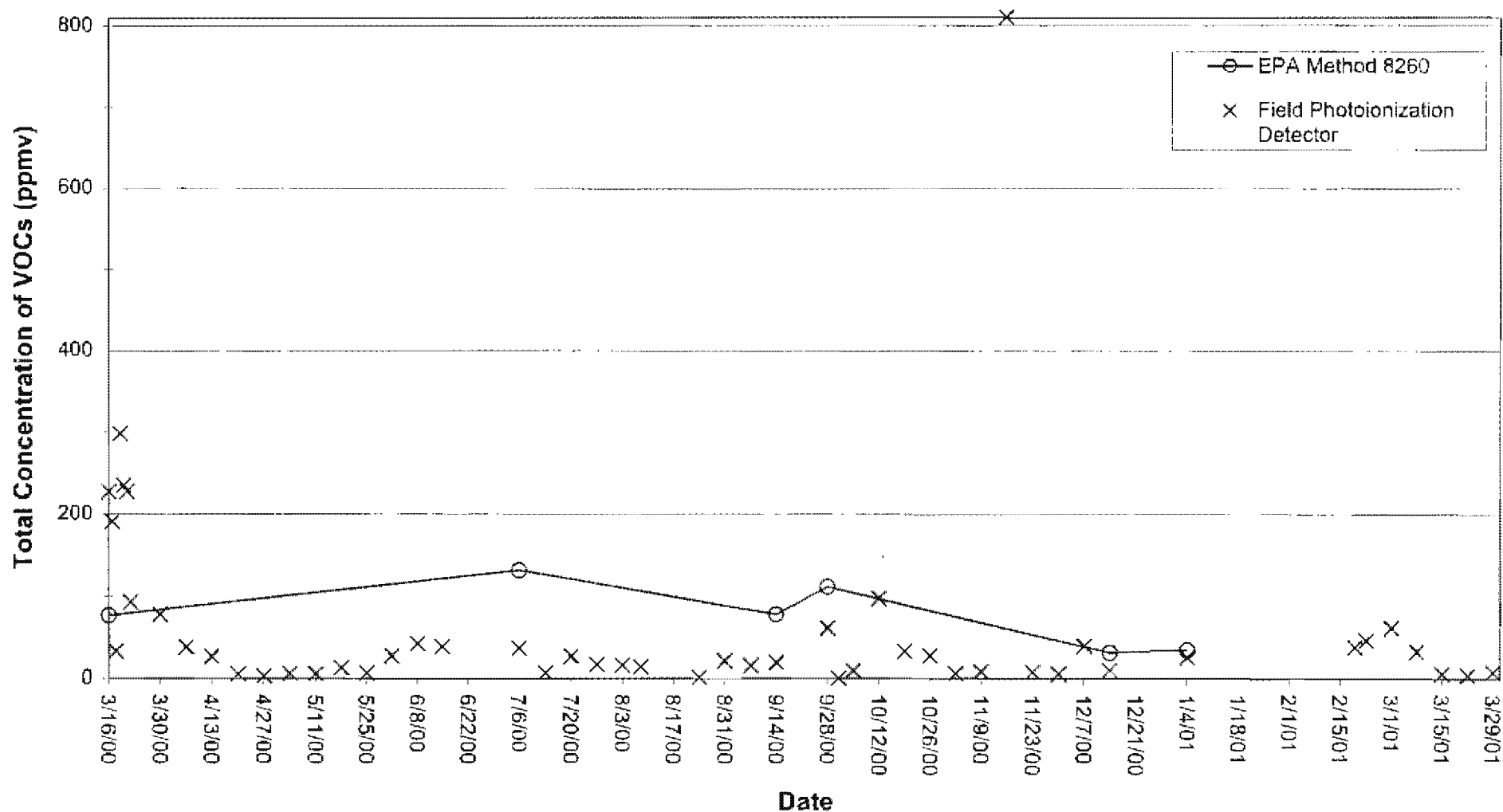


# FIGURE 9c

## Concentrations of Total VOCs versus Time: Extraction Well SVE-2

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

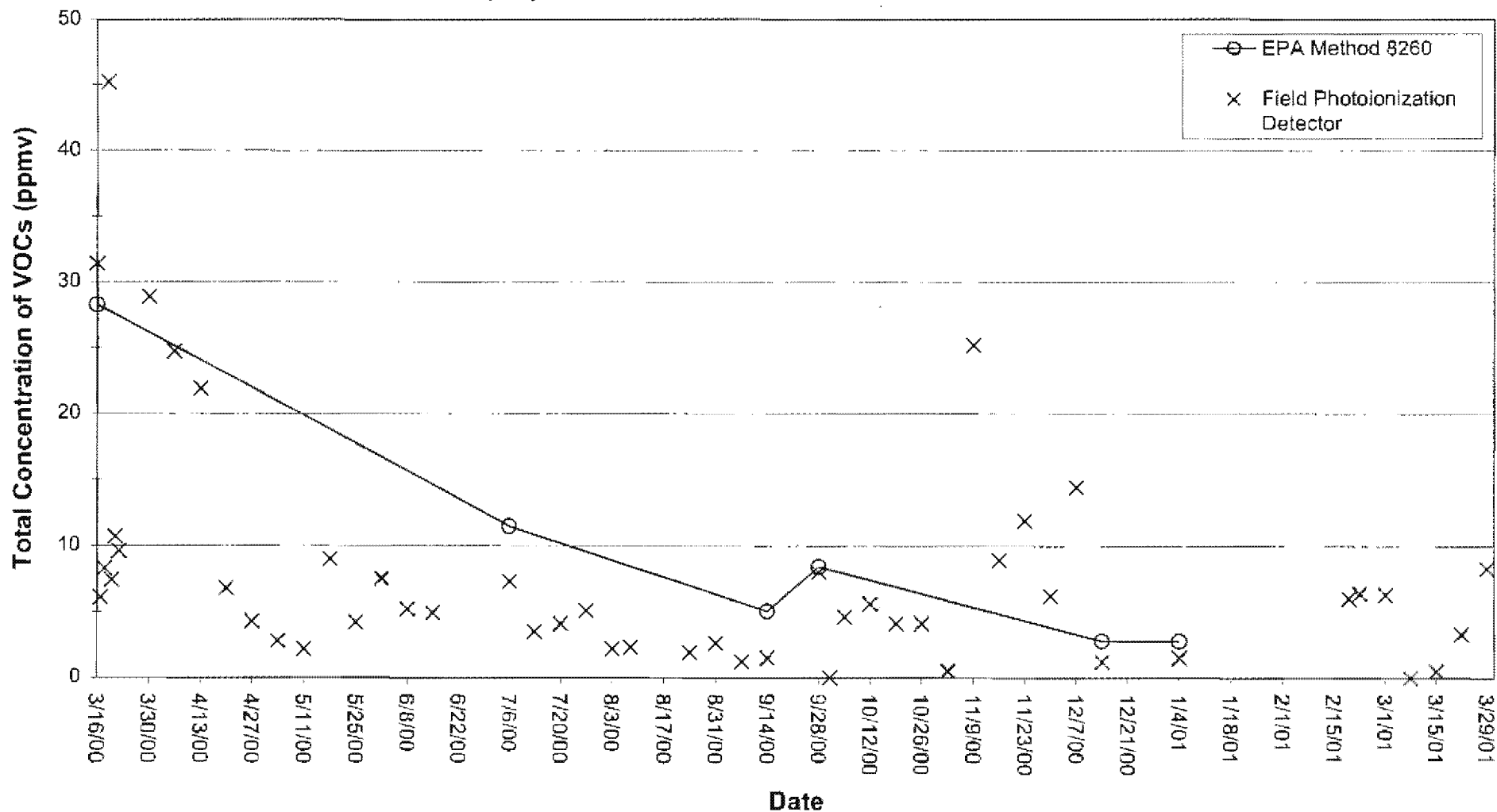


# FIGURE 9d

## Concentrations of Total VOCs versus Time: Extraction Well SVE-3

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

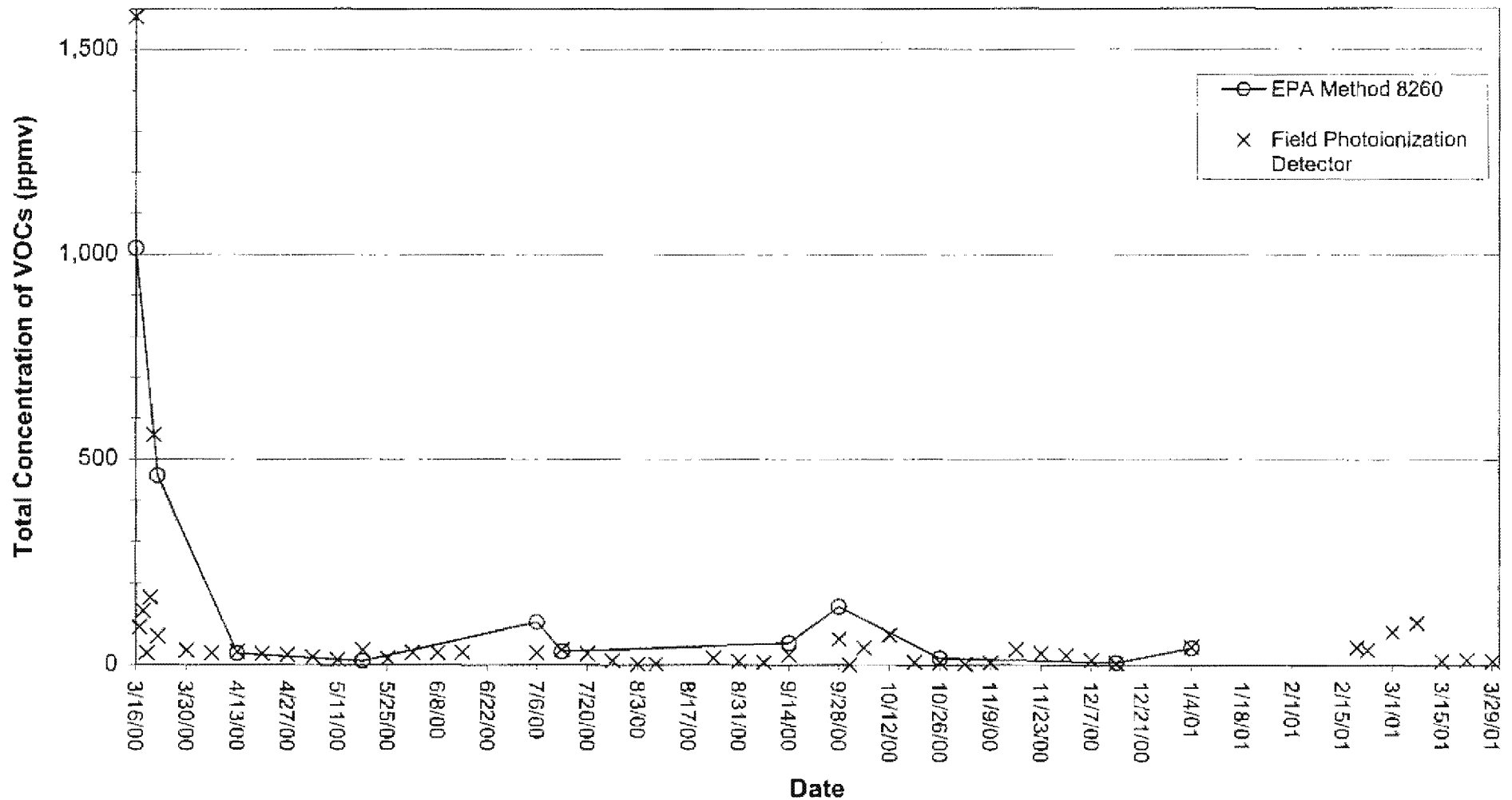


# FIGURE 9e

## Concentrations of Total VOCs versus Time: Extraction Well SVE-D1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

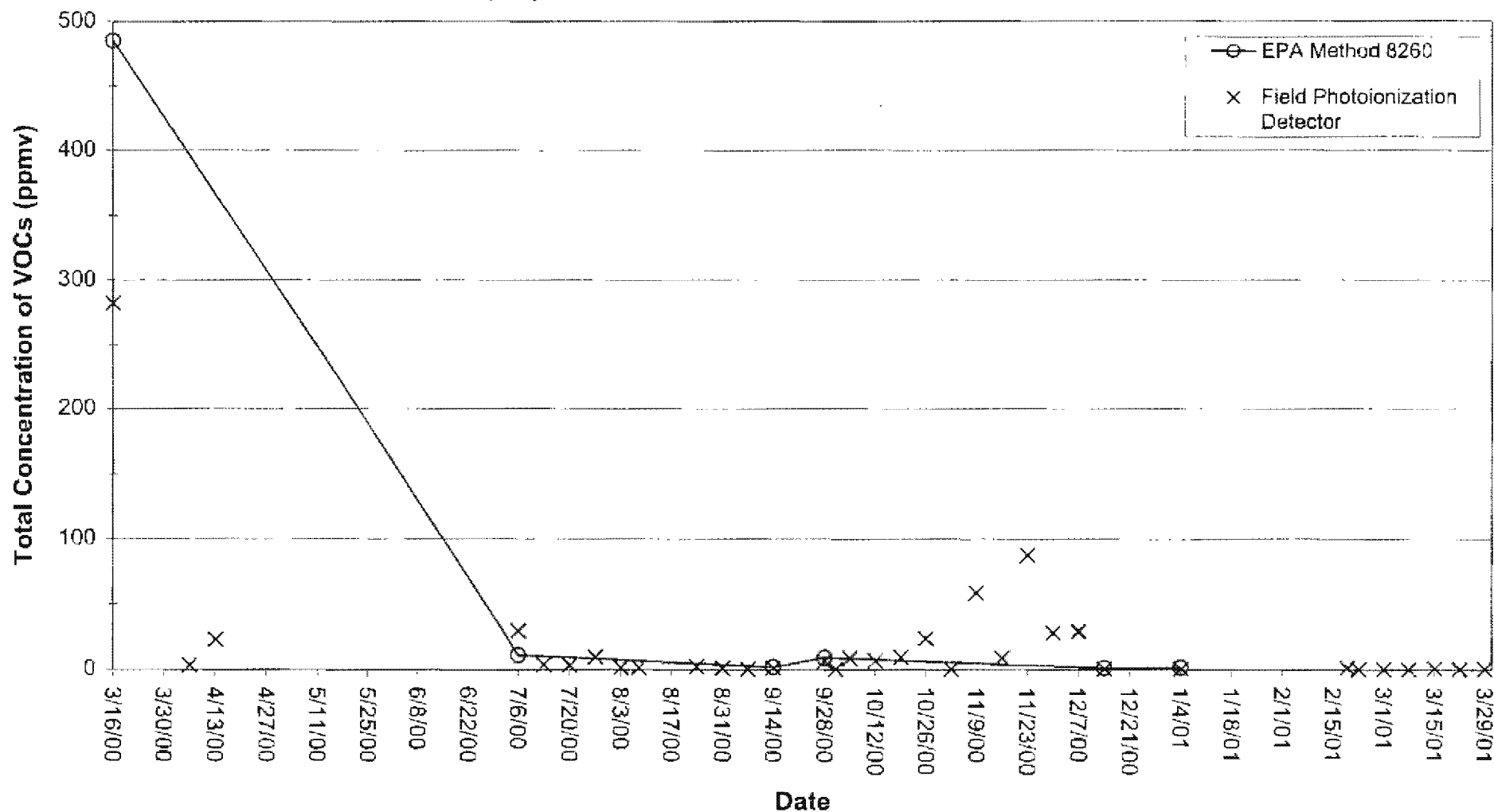


# FIGURE 9f

## Concentrations of Total VOCs versus Time: Extraction Well VMP-D1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

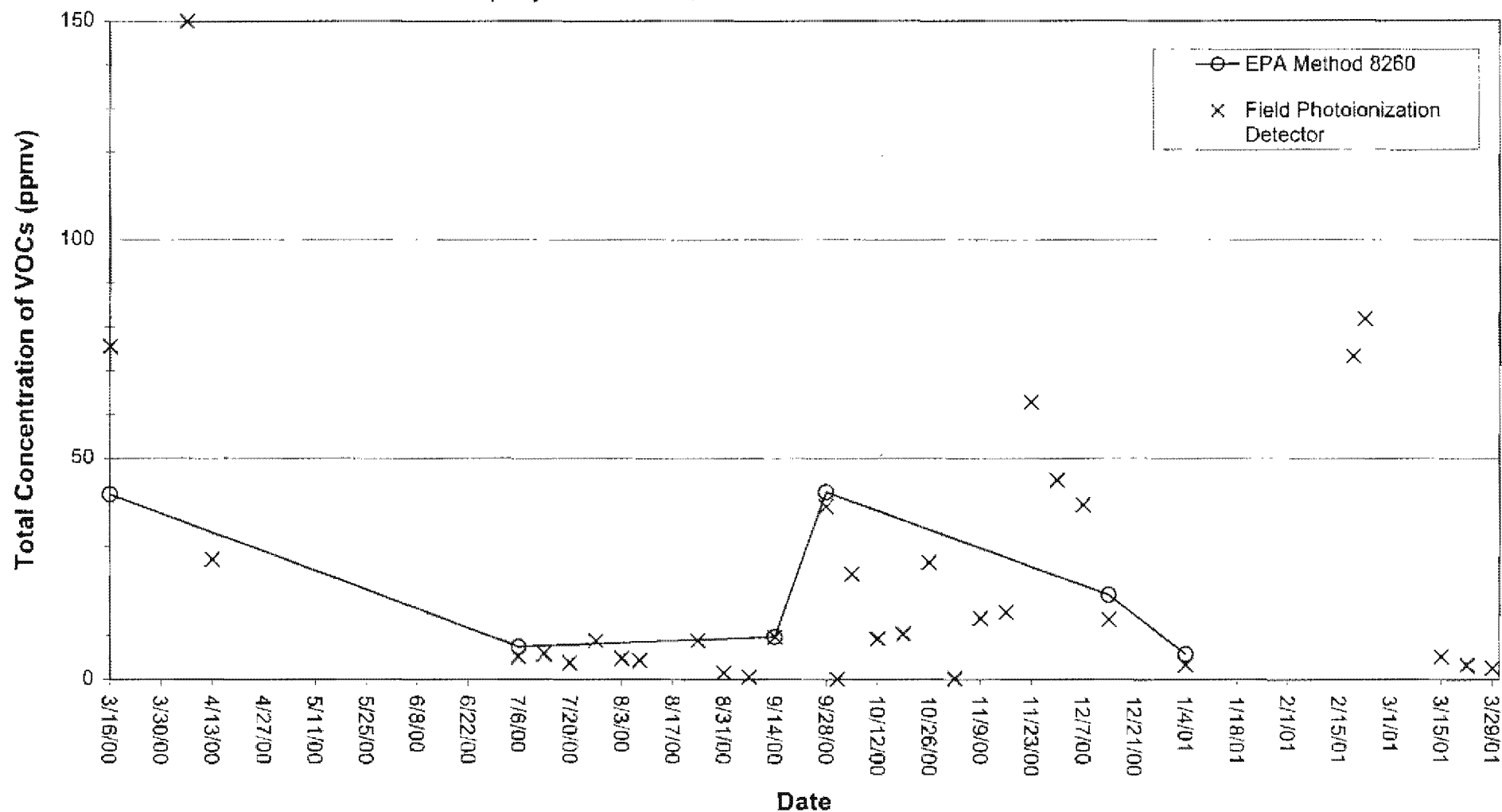


# FIGURE 9g

## Concentrations of Total VOCs versus Time: Extraction Well VMP-D2

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

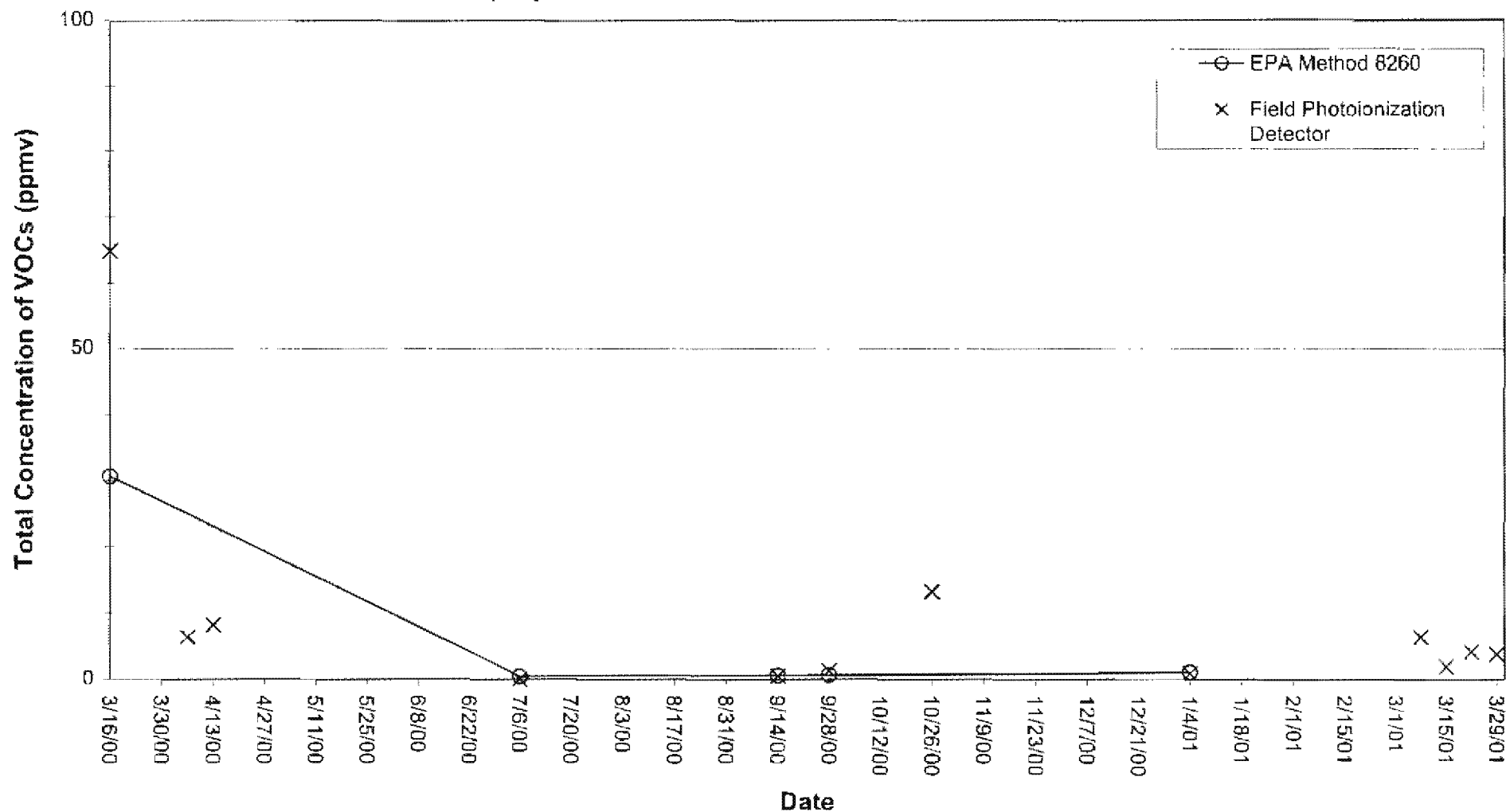


# FIGURE 9h

## Concentrations of Total VOCs versus Time: Extraction Well VMP-1

Quarterly Progress Report for January through March 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



## **APPENDIX A**

### **Groundwater Purge and Water Quality Monitoring Forms for Groundwater Sampling**

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: 10-66 DATE: 3/8/01  
PROJECT NUMBER: 991103.01 WELL NUMBER: MW-1 PERSONNEL: JCH  
WELL VOLUME CALCULATION:

|                        |                         |                       |                       |                         |
|------------------------|-------------------------|-----------------------|-----------------------|-------------------------|
| Depth of<br>Well (ft.) | Depth to<br>Water (ft.) | Water<br>Column (ft.) | Multiplier<br>(below) | Casing Vol<br>(gallons) |
| <u>69.98</u>           | <u>45.09</u>            | =                     | *                     | =                       |

Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" Ground Pies

PURGE DEPTH: 65'

START TIME: 14:45

END TIME: 15:11

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

|              |         |          |
|--------------|---------|----------|
|              | Field   | Standard |
| Instrument   | measure | measure  |
| Conductivity |         |          |
| pH           |         |          |
| pH           |         |          |
| Turbidity    |         |          |
| Temperature  |         |          |
| Depth Probe  |         |          |

|   |              |              |              |              |              |              |  |  |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--|--|
| Time  | <u>14:50</u> | <u>14:55</u> | <u>14:58</u> | <u>15:03</u> | <u>15:07</u> | <u>15:11</u> |  |  |
| Volume Purged (gallons)                       | <u>10</u>    | <u>20</u>    | <u>30</u>    | <u>40</u>    | <u>45</u>    | <u>50</u>    |  |  |
| Temperature (degrees F or C)                  | <u>72.1</u>  | <u>71.2</u>  | <u>70.1</u>  | <u>70.2</u>  | <u>69.7</u>  | <u>69.7</u>  |  |  |
| pH (units)                                    | <u>7.27</u>  | <u>7.52</u>  | <u>7.42</u>  | <u>7.25</u>  | <u>7.33</u>  | <u>7.29</u>  |  |  |
| Specific Conductivity (uS/cm)                 | <u>2.020</u> | <u>1.770</u> | <u>2.840</u> | <u>3.921</u> | <u>5.780</u> | <u>5.810</u> |  |  |
| Turbidity/Color (NTU)                         | <u>13.0</u>  | <u>4.93</u>  | <u>2.91</u>  | <u>1.79</u>  | <u>1.85</u>  | <u>1.44</u>  |  |  |
| Odor  | <u>None</u>  | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     |  |  |
| Depth to Water (ft below TOC)<br>during purge |              |              |              |              |              |              |  |  |
| Number of Casing<br>Volumes removed           |              |              |              |              |              |              |  |  |
| Purge Rate (gallons/minute)                   |              |              |              |              |              |              |  |  |

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-1

2 x 40 mL VOA W/KE 18260  
1 x 100 mL HPLC 18260  
(Total Chlorm)  
HPLC Chlorm



GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc. ①

PROJECT NAME: *M2A6*

DATE: *3/8/01*

PROJECT NUMBER: *991103-01*

WELL NUMBER: *MW-2*

PERSONNEL: *SC H*

WELL VOLUME CALCULATION:

|  |                      |                    |                    |                      |
|--|----------------------|--------------------|--------------------|----------------------|
| Depth of Well (ft.)  | Depth to Water (ft.) | Water Column (ft.) | Multiplier (below) | Casing Vol (gallons) |
| <i>69.55</i>   | <i>43.25</i>         | <i>26.3</i>        | <i>0.64</i>        | <i>16.4</i>          |
| Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft. |                      |                    |                    | <i>50.4</i>          |

No. of bailers prior to start of purge: *0*

PURGE METHOD: *2" Ground Pore*

PURGE DEPTH: *65'*

START TIME: *10:27*

END TIME:

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

| Instrument   | Field measure | Standard measure |
|--------------|---------------|------------------|
| Conductivity |               |                  |
| pH           |               |                  |
| pH           |               |                  |
| Turbidity    |               |                  |
| Temperature  |               |                  |
| Depth Probe  |               |                  |

*See MW-4*

|  |              |              |              |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Time                                       | <i>10:34</i> | <i>10:43</i> | <i>10:51</i> | <i>10:58</i> | <i>11:01</i> | <i>11:10</i> | <i>11:15</i> | <i>11:26</i> |
| Volume Purged (gallons)                    | <i>10</i>    | <i>20</i>    | <i>25</i>    | <i>30</i>    | <i>35</i>    | <i>40</i>    | <i>45</i>    | <i>50</i>    |
| Temperature (degrees <del>F</del> or C)    | <i>69.7</i>  | <i>71.3</i>  | <i>72.0</i>  | <i>71.5</i>  | <i>71.7</i>  | <i>71.3</i>  | <i>72.1</i>  | <i>71.9</i>  |
| pH (units)                                 | <i>7.23</i>  | <i>7.29</i>  | <i>7.24</i>  | <i>7.23</i>  | <i>7.30</i>  | <i>7.09</i>  | <i>7.21</i>  | <i>7.23</i>  |
| Specific Conductivity (uS/cm)              | <i>2.360</i> | <i>3.290</i> | <i>3.530</i> | <i>3.510</i> | <i>3.580</i> | <i>3.620</i> | <i>3.680</i> | <i>3.740</i> |
| Turbidity/Color (NTU)                      | <i>166</i>   | <i>118</i>   | <i>222</i>   | <i>576</i>   | <i>347</i>   | <i>164</i>   | <i>62.5</i>  | <i>34.0</i>  |
| Odor                                       | <i>NONE</i>  | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     |
| Depth to Water (ft below TOC) during purge |              |              |              |              |              |              |              |              |
| Number of Casing Volumes removed           |              |              |              |              |              |              |              |              |
| Purge Rate (gallons/minute)                | <i>1.5</i>   | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     | <i>—</i>     |

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: *MW-2*

*4 x 40 ML VOA's*

*9260*

*W1A1*

*2 x ML*

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc. <sup>(2)</sup>

PROJECT NAME: WY60 DATE: 3/9/01  
PROJECT NUMBER: 991103.01 WELL NUMBER: MW-2 PERSONNEL: S.H

WELL VOLUME CALCULATION:

| Depth of Well (ft.) | Depth to Water (ft.) | Water Column (ft.) | Multiplier (below) | Casing Vol (gallons) |
|---------------------|----------------------|--------------------|--------------------|----------------------|
|                     |                      |                    |                    |                      |

Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" Ground

PURGE DEPTH: 63'

START TIME:

END TIME: 11:55

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

| Instrument | Field measure | Standard measure |
|------------|---------------|------------------|
|            |               |                  |

Conductivity

pH

pH

Turbidity

Temperature

Depth Probe

SEE MW-4

| Time                                       |              |              |              |              |  |  |  |  |
|--|--------------|--------------|--------------|--------------|--|--|--|--|
|  | <u>11:32</u> | <u>11:39</u> | <u>11:48</u> | <u>11:55</u> |  |  |  |  |
| Volume Purged (gallons)                    | <u>55</u>    | <u>60</u>    | <u>70</u>    | <u>90</u>    |  |  |  |  |
| Temperature (degrees <sup>F</sup> or C)    | <u>71.7</u>  | <u>71.6</u>  | <u>71.8</u>  | <u>72.3</u>  |  |  |  |  |
| pH (units)                                 | <u>7.08</u>  | <u>7.20</u>  | <u>7.21</u>  | <u>7.20</u>  |  |  |  |  |
| Specific Conductivity (uS/cm)              | <u>3.890</u> | <u>3.830</u> | <u>3.600</u> | <u>3.73</u>  |  |  |  |  |
| Turbidity/Color (NTU)                      | <u>22.5</u>  | <u>26.5</u>  | <u>10.26</u> | <u>3.75</u>  |  |  |  |  |
| Odor                                       | <u>NDA</u>   | <u>-</u>     | <u>-</u>     | <u>-</u>     |  |  |  |  |
| Depth to Water (ft below TOC) during purge |              |              |              |              |  |  |  |  |
| Number of Casing Volumes removed           |              |              |              |              |  |  |  |  |
| Purge Rate (gallons/minute)                | <u>1.5</u>   | <u>-</u>     | <u>-</u>     | <u>-</u>     |  |  |  |  |

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-2

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: W460 DATE: 3/8/01  
PROJECT NUMBER: 991103 WELL NUMBER: MW-3 PERSONNEL: S. H  
WELL VOLUME CALCULATION:  
Depth of Well (ft.) 69.93 - Depth to Water (ft.) 45.21 = Water Column (ft.) 24.72 \* Multiplier (below) 0.64 = Casing Vol. (gallons) 15.82 x 3 = 47.4  
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 4

PURGE METHOD: 2" GRINDERS

PURGE DEPTH: 65'

START TIME: 12:38

END TIME: 13:01

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

| Instrument   | Field measure | Standard measure |
|--------------|---------------|------------------|
| Conductivity |               |                  |
| pH           |               |                  |
| pH           |               |                  |
| Turbidity    |               |                  |
| Temperature  |               |                  |
| Depth Probe  |               |                  |

|  |              |              |              |              |              |              |  |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|--|
| Time                                       | <u>12:41</u> | <u>12:46</u> | <u>12:49</u> | <u>12:53</u> | <u>12:57</u> | <u>13:01</u> |  |  |
| Volume Purged (gallons)                    | <u>10</u>    | <u>20</u>    | <u>30</u>    | <u>40</u>    | <u>50</u>    | <u>55</u>    |  |  |
| Temperature (degrees F or C)               | <u>69.2</u>  | <u>68.6</u>  | <u>68.8</u>  | <u>68.8</u>  | <u>68.9</u>  | <u>68.9</u>  |  |  |
| pH (units)                                 | <u>7.11</u>  | <u>7.36</u>  | <u>7.36</u>  | <u>7.43</u>  | <u>7.39</u>  | <u>7.39</u>  |  |  |
| Specific Conductivity (uS/cm)              | <u>1.620</u> | <u>2.440</u> | <u>3.080</u> | <u>3.300</u> | <u>3.250</u> | <u>2.940</u> |  |  |
| Turbidity/Color (NTU)                      | <u>45.1</u>  | <u>119.0</u> | <u>17.6</u>  | <u>7.41</u>  | <u>3.24</u>  | <u>2.40</u>  |  |  |
| Odor                                       | <u>NONE</u>  | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     |  |  |
| Depth to Water (ft below TOC) during purge |              |              |              |              |              |              |  |  |
| Number of Casing Volumes removed           |              |              |              |              |              |              |  |  |
| Purge Rate (gallons/minute)                | <u>4.0</u>   | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     | <u>-</u>     |  |  |

| COMMENTS/      | Field I.D.  | Time Collected | Containers & Preservation | Analyses Requested  |
|----------------|-------------|----------------|---------------------------|---------------------|
| SAMPLES:       | <u>MW-3</u> |                | <u>2 x 40 ML VOA W/HE</u> | <u>8360</u>         |
|                |             |                | <u>1 x 100 ML S.</u>      | <u>TOTAL PHOSPH</u> |
|                |             |                |                           | <u>"Hex" PHOSPH</u> |
| <u>MW-3</u>    |             |                |                           |                     |
| <u>RIN SAT</u> |             |                | <u>2 x 40 ML VOA</u>      | <u>8360</u>         |
| <u>RIN SAT</u> |             |                | <u>1 x 100 ML PLASTIC</u> | <u>TOTAL PHOSPH</u> |
|                |             |                |                           | <u>Hex PHOSPH</u>   |

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: W-66 DATE: 3/8/01  
PROJECT NUMBER: 991103.01 WELL NUMBER: MW-4 PERSONNEL: S.H  
WELL VOLUME CALCULATION:

Depth of Well (ft.) 45.62 Depth to Water (ft.) 45.62 Water Column (ft.) 23.44 Multiplier (below) 0.64 Casing Volume (gallons) 15.0 x 3 = 45  
69.06 = 23.44 \* 0.64 = 15.0 x 3 = 45  
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.54; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: 0

PURGE METHOD: 2" GRINDFO;

PURGE DEPTH: 65'

START TIME: 09:30

END TIME: 09:55

TOTAL GALLONS PURGED: 55

INSTRUMENT CALIBRATION

| Instrument   | Field measure | Standard measure |
|--------------|---------------|------------------|
| Conductivity | <u>1000</u>   | <u>1000</u>      |
| pH           | <u>6.99</u>   | <u>7.00</u>      |
| pH           | <u>3.98</u>   | <u>4.01</u>      |
| Turbidity    |               |                  |
| Temperature  |               |                  |
| Depth Probe  |               |                  |

|  |              |              |              |              |              |  |  |  |
|--|--------------|--------------|--------------|--------------|--------------|--|--|--|
| Time                                       | <u>9:39</u>  | <u>9:45</u>  | <u>9:47</u>  | <u>9:49</u>  | <u>9:51</u>  |  |  |  |
| Volume Purged (gallons)                    | <u>20</u>    | <u>10</u>    | <u>30</u>    | <u>40</u>    | <u>50</u>    |  |  |  |
| Temperature (degrees F or C)               | <u>69.7</u>  | <u>67.6</u>  | <u>69.7</u>  | <u>69.8</u>  | <u>70.0</u>  |  |  |  |
| pH (units)                                 | <u>7.02</u>  | <u>6.99</u>  | <u>7.04</u>  | <u>7.07</u>  | <u>7.06</u>  |  |  |  |
| Specific Conductivity (uS/cm)              | <u>3.888</u> | <u>4.510</u> | <u>4.580</u> | <u>4.640</u> | <u>4.660</u> |  |  |  |
| Turbidity/Color (NTU)                      | <u>15.1</u>  | <u>6.20</u>  | <u>2.56</u>  | <u>2.91</u>  | <u>0.76</u>  |  |  |  |
| Odor                                       | <u>NONE</u>  |              |              |              |              |  |  |  |
| Depth to Water (ft below TOC) during purge |              |              |              |              |              |  |  |  |
| Number of Casing Volumes removed           |              |              |              |              |              |  |  |  |
| Purge Rate (gallons/minute)                | <u>4.0</u>   |              |              |              |              |  |  |  |

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: MW-4 9:58 2 x 40 mL WA  
1 HNO<sub>3</sub>

GROUNDWATER PURGE AND  
WATER QUALITY MONITORING FORM

Erler &  
Kalinowski, Inc.

PROJECT NAME: *W106* DATE: *3/9/01*  
PROJECT NUMBER: *991103.01* WELL NUMBER: *MW-5* PERSONNEL: *SC-H*

WELL VOLUME CALCULATION:

Depth of Well (ft.) *64.85* Depth to Water (ft.) *45.95* Water Column (ft.) *= 22.9* Multiplier (below) *0.64* Casing Vol (gallons) *= 14.6 x 3 = 43.8*  
Mult. for casing diam. = 2-in.=0.16; 4-in.=0.64; 5-in.=1.02; 6-in.=1.44 gals/ft.

No. of bailers prior to start of purge: *0*

PURGE METHOD: *0 2" GROUNDFOSS*

PURGE DEPTH: *64'*

START TIME: *13:45*

END TIME: *14:19*

TOTAL GALLONS PURGED:

INSTRUMENT CALIBRATION

| Instrument   | Field measure   | Standard measure |
|--------------|-----------------|------------------|
| Conductivity |                 |                  |
| pH           | <i>5.1 MW-4</i> |                  |
| pH           |                 |                  |
| Turbidity    |                 |                  |
| Temperature  |                 |                  |
| Depth Probe  |                 |                  |

| Time                                       |              |              |              |              |              |              |  |  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--|--|
|  | <i>13:50</i> | <i>13:59</i> | <i>14:04</i> | <i>14:09</i> | <i>14:14</i> | <i>14:19</i> |  |  |
| Volume Purged (gallons)                    | <i>10</i>    | <i>20</i>    | <i>30</i>    | <i>40</i>    | <i>50</i>    | <i>55</i>    |  |  |
| Temperature (degrees F or C)               | <i>68.1</i>  | <i>69.5</i>  | <i>69.9</i>  | <i>69.7</i>  | <i>69.5</i>  | <i>69.6</i>  |  |  |
| pH (units)                                 | <i>6.98</i>  | <i>7.18</i>  | <i>7.20</i>  | <i>7.20</i>  | <i>7.24</i>  | <i>7.18</i>  |  |  |
| Specific Conductivity (uS/cm)              | <i>4.330</i> | <i>4.890</i> | <i>5.043</i> | <i>5.090</i> | <i>4.970</i> | <i>5.040</i> |  |  |
| Turbidity/Color (NTU)                      | <i>2.10</i>  | <i>3.43</i>  | <i>2.19</i>  | <i>1.79</i>  | <i>1.43</i>  | <i>1.30</i>  |  |  |
| Odor                                       | <i>NONE</i>  | <i>-</i>     | <i>-</i>     | <i>-</i>     | <i>-</i>     | <i>-</i>     |  |  |
| Depth to Water (ft below TOC) during purge |              |              |              |              |              |              |  |  |
| Number of Casing Volumes removed           |              |              |              |              |              |              |  |  |
| Purge Rate (gallons/minute)                | <i>4.0</i>   | <i>-</i>     | <i>-</i>     | <i>-</i>     | <i>-</i>     | <i>-</i>     |  |  |

COMMENTS/ Field I.D. Time Collected Containers & Preservation Analyses Requested

SAMPLES: *MW-5*

## **APPENDIX B**

### **Laboratory Reports and Chain-of-Custody Forms for Groundwater Sampling**



**ORANGE COAST ANALYTICAL, INC.**

3002 Dow, Suite 532, Tustin, CA 92780 (714) 832-0064 Fax (714) 832-0067  
4620 E. Elwood, Suite 4, Phoenix, AZ 85040 (480) 736-0960 Fax (480) 736-0970

**RECEIVED**

**MAR 26 2001**

**ERLER & KALINOWSKI, INC.  
SANTA MONICA OFFICE**

**LABORATORY REPORT FORM**

Laboratory Name: ORANGE COAST ANALYTICAL, INC.

Address: 3002 Dow Suite 532 Tustin, CA 92780

Telephone: (714) 832-0064

**Laboratory Certification**

(ELAP) No.: 1416

Expiration Date: 2003

Laboratory Director's Name (Print): Mark Noorani

Client: Erler & Kalinowski, Inc.

Project No.: 991103.01

Project Name: Webb

Laboratory Reference: EKI 12211

Analytical Method: EPA 8260 Cam Metals

Date Sampled: 03/08/01

Date Received: 03/08/01

Date Reported: 03/15/01

Sample Matrix: Water

Chain of Custody Received: Yes

Laboratory Director's Signature: Mark Noorani

**Erler & Kalinowski, Inc.**  
 ATTN: Mr. Brian Auchard  
 3250 Ocean Park Blvd. Suite 385  
 Santa Monica, CA 90405

**Client Project ID:** Webb  
**Client Project #:** 991103.01

|  |                           |          |          |          |          |
|--|---------------------------|----------|----------|----------|----------|
|  | <b>Sampled:</b>           | ---      | 03/08/01 | 03/08/01 | 03/08/01 |
|  | <b>Received:</b>          | ---      | 03/08/01 | 03/08/01 | 03/08/01 |
| <b>SAMPLE DESCRIPTION (Water)</b>            | <b>Analyzed:</b>          | 03/13/01 | 03/14/01 | 03/15/01 | 03/15/01 |
| <b>Laboratory Reference #: EKI 12211</b>     | <b>Reported:</b>          | 03/15/01 | 03/15/01 | 03/15/01 | 03/15/01 |
|  | <b>Lab Sample I.D.</b>    | MB03013  | 01030150 | 01030151 | 01030152 |
| <b>VOLATILE ORGANICS BY GC/MS (EPA 8260)</b> | <b>Client Sample I.D.</b> | ---      | MW-1     | MW-2     | MW-2 Dup |
|  | <b>DILUTION FACTOR</b>    | 1.0      | 200      | 20       | 20       |

| ANALYTE                   | CAS<br>NUMBER | DETECTION<br>LIMIT | MDL | SAMPLE RESULTS |        |       |       |
|---------------------------|---------------|--------------------|-----|----------------|--------|-------|-------|
|                           |               |                    |     | µg/l           | µg/l   | µg/l  | µg/l  |
| Acetone                   | 67-64-1       | 2.0                | 2.0 | <2.0           | <400   | <40   | <40   |
| Benzene                   | 71-43-2       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Bromodichloromethane      | 75-27-4       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Bromoform                 | 75-25-2       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Bromomethane              | 74-83-9       | 1.0                | 1.0 | <1.0           | <200   | <20   | <20   |
| 2-Butanone                | 78-93-3       | 1.0                | 1.0 | <1.0           | <200   | <20   | <20   |
| Carbon Disulfide          | 75-15-0       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Carbon tetrachloride      | 56-23-5       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Chlorobenzene             | 108-90-7      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Chlorodibromomethane      | 124-48-1      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Chloroethane              | 75-00-3       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 2-Chloroethyl vinyl ether | 110-75-8      | 1.0                | 1.0 | <1.0           | <200   | <20   | <20   |
| Chloroform                | 67-66-3       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Chloromethane             | 74-87-3       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,1-Dichloroethane        | 75-34-3       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,2-Dichloroethane        | 107-06-2      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,1-Dichloroethene        | 75-35-4       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| cis-1,2-Dichloroethene    | 156-59-2      | 0.5                | 0.5 | <0.5           | <100   | 44    | 42    |
| trans-1,2-Dichloroethene  | 156-60-5      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,2-Dichloropropane       | 78-87-5       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| cis-1,3-Dichloropropene   | 10061-01-5    | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| trans-1,3-Dichloropropene | 10061-02-6    | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Ethylbenzene              | 100-41-4      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 2-Hexanone                | 591-78-6      | 1.0                | 1.0 | <1.0           | <200   | <20   | <20   |
| Methylene chloride        | 75-09-2       | 2.5                | 2.5 | <2.5           | <500   | <50   | <50   |
| 4-Methyl-2-pentanone      | 108-10-1      | 1.0                | 1.0 | <1.0           | <200   | <20   | <20   |
| Styrene                   | 100-42-5      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,1,2,2-Tetrachloroethane | 79-34-5       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Tetrachloroethene         | 127-18-4      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Toluene                   | 108-88-3      | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,1,1-Trichloroethane     | 71-55-6       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| 1,1,2-Trichloroethane     | 79-00-5       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Trichloroethene           | 79-01-6       | 0.5                | 0.5 | <0.5           | 23,000 | 1,800 | 1,600 |
| Trichlorofluoromethane    | 75-69-4       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Vinyl acetate             | 108-05-4      | 1.0                | 1.0 | <1.0           | <200   | <20   | <20   |
| Vinyl chloride            | 75-01-4       | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |
| Total Xylenes             | 1330-20-7     | 0.5                | 0.5 | <0.5           | <100   | <10   | <10   |

**SURROGATE RECOVERY%**

|                             |    |    |    |    |
|-----------------------------|----|----|----|----|
| <b>Dibromofluoromethane</b> | 93 | 91 | 93 | 95 |
| <b>Toluene-d8</b>           | 91 | 92 | 88 | 88 |
| <b>4-Bromofluorobenzene</b> | 88 | 91 | 95 | 94 |



Erfer & Kalinowski, Inc.  
ATTN: Mr. Brian Auchard  
3250 Ocean Park Blvd. Suite 385  
Santa Monica, CA 90405

Client Project ID: Webb  
Client Project #: 991103.01

**SAMPLE DESCRIPTION (Water)**

Laboratory Reference #: EKI 12211

**Sampled:** 03/08/01 03/08/01 03/08/01 03/08/01  
**Received:** 03/08/01 03/08/01 03/08/01 03/08/01  
**Analyzed:** 03/15/01 03/14/01 03/13/01 03/14/01  
**Reported:** 03/15/01 03/15/01 03/15/01 03/15/01

**Lab Sample I.D.** 01030153 01030154 01030155 01030156

**VOLATILE ORGANICS BY GC/MS (EPA 8260) Client Sample I.D.** MW-3 MW-4 MW-5 Rinsate Blank

**DILUTION FACTOR**

20 1.0 50 1.0

| ANALYTE                   | CAS<br>NUMBER | DETECTION<br>LIMIT<br>µg/l | MDL | SAMPLE RESULTS |      |       |      |
|---------------------------|---------------|----------------------------|-----|----------------|------|-------|------|
|                           |               |                            |     | µg/l           | µg/l | µg/l  | µg/l |
| Acetone                   | 67-64-1       | 2.0                        | 2.0 | <40            | <2.0 | <100  | <2.0 |
| Benzene                   | 71-43-2       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Bromodichloromethane      | 75-27-4       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Bromoform                 | 75-25-2       | 0.5                        | 0.5 | <10            | <0.5 | <25   | 2.3  |
| Bromomethane              | 74-83-9       | 1.0                        | 1.0 | <20            | <1.0 | <50   | <1.0 |
| 2-Butanone                | 78-93-3       | 1.0                        | 1.0 | <20            | <1.0 | <50   | <1.0 |
| Carbon Disulfide          | 75-15-0       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Carbon tetrachloride      | 56-23-5       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Chlorobenzene             | 108-90-7      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Chlorodibromomethane      | 124-48-1      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Chloroethane              | 75-00-3       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 2-Chloroethyl vinyl ether | 110-75-8      | 1.0                        | 1.0 | <20            | <1.0 | <50   | <1.0 |
| Chloroform                | 67-66-3       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Chloromethane             | 74-87-3       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 1,1-Dichloroethane        | 75-34-3       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 1,2-Dichloroethane        | 107-06-2      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 1,1-Dichloroethene        | 75-35-4       | 0.5                        | 0.5 | 55             | <0.5 | <25   | <0.5 |
| cis-1,2-Dichloroethene    | 156-59-2      | 0.5                        | 0.5 | 200            | <0.5 | 260   | 5.4  |
| trans-1,2-Dichloroethene  | 156-60-5      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 1,2-Dichloropropane       | 78-87-5       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| cis-1,3-Dichloropropene   | 10061-01-5    | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| trans-1,3-Dichloropropene | 10061-02-6    | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Ethylbenzene              | 100-41-4      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 2-Hexanone                | 591-78-6      | 1.0                        | 1.0 | <20            | <1.0 | <50   | <1.0 |
| Methylene chloride        | 75-09-2       | 2.5                        | 2.5 | <50            | <2.5 | <125  | <2.5 |
| 4-Methyl-2-pentanone      | 108-10-1      | 1.0                        | 1.0 | <20            | <1.0 | <50   | <1.0 |
| Styrene                   | 100-42-5      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 1,1,2,2-Tetrachloroethane | 79-34-5       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Tetrachloroethene         | 127-18-4      | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Toluene                   | 108-88-3      | 0.5                        | 0.5 | <10            | <0.5 | 140   | <0.5 |
| 1,1,1-Trichloroethane     | 71-55-6       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| 1,1,2-Trichloroethane     | 79-00-5       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Trichloroethene           | 79-01-6       | 0.5                        | 0.5 | 1,700          | <0.5 | 3,600 | 120  |
| Trichlorofluoromethane    | 75-69-4       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Vinyl acetate             | 108-05-4      | 1.0                        | 1.0 | <20            | <1.0 | <50   | <1.0 |
| Vinyl chloride            | 75-01-4       | 0.5                        | 0.5 | <10            | <0.5 | <25   | <0.5 |
| Total Xylenes             | 1330-20-7     | 0.5                        | 0.5 | <10            | <0.5 | 91    | <0.5 |

**SURROGATE RECOVERY%**

**Dibromofluoromethane** 95 95 109 96  
**Toluene-d8** 90 91 87 87  
**4-Bromofluorobenzene** 91 90 96 90

**Erler & Kalinowski, Inc.**  
 .TTN: Mr. Brian Auchard  
 250 Ocean Park Blvd. Suite 385  
 Santa Monica, CA 90405

**Client Project ID:** Webb  
**Client Project #:** 991103.01

**SAMPLE DESCRIPTION (Water)**

**Laboratory Reference #:** EKI 12211

**Sampled:** 03/08/01  
**Received:** 03/08/01  
**Analyzed:** 03/15/01  
**Reported:** 03/15/01

**Lab Sample I.D.**

01030157

**VOLATILE ORGANICS BY GC/MS (EPA 8260)**

Rinsate water

**Client Sample I.D.**

1

| <b>ANALYTE</b>            | <b>CAS<br/>NUMBER</b> | <b>DETECTION<br/>LIMIT</b> | <b>MDL</b> | <b>SAMPLE RESULTS</b> |
|---------------------------|-----------------------|----------------------------|------------|-----------------------|
|                           |                       | <b>µg/l</b>                |            | <b>µg/l</b>           |
| Acetone                   | 67-64-1               | 2.0                        | 2.0        | <2.0                  |
| Benzene                   | 71-43-2               | 0.5                        | 0.5        | <0.5                  |
| Bromodichloromethane      | 75-27-4               | 0.5                        | 0.5        | <0.5                  |
| Bromoform                 | 75-25-2               | 0.5                        | 0.5        | 2.9                   |
| Bromomethane              | 74-83-9               | 1.0                        | 1.0        | <1.0                  |
| -Butanone                 | 78-93-3               | 1.0                        | 1.0        | <1.0                  |
| Carbon Disulfide          | 75-15-0               | 0.5                        | 0.5        | <0.5                  |
| Carbon tetrachloride      | 56-23-5               | 0.5                        | 0.5        | <0.5                  |
| Chlorobenzene             | 108-90-7              | 0.5                        | 0.5        | <0.5                  |
| Chlorodibromomethane      | 124-48-1              | 0.5                        | 0.5        | 1.2                   |
| Chloroethane              | 75-00-3               | 0.5                        | 0.5        | <0.5                  |
| -Chloroethyl vinyl ether  | 110-75-8              | 1.0                        | 1.0        | <1.0                  |
| Chloroform                | 67-66-3               | 0.5                        | 0.5        | <0.5                  |
| Chloromethane             | 74-87-3               | 0.5                        | 0.5        | <0.5                  |
| ,1-Dichloroethane         | 75-34-3               | 0.5                        | 0.5        | <0.5                  |
| ,2-Dichloroethane         | 107-06-2              | 0.5                        | 0.5        | <0.5                  |
| 1,1-Dichloroethene        | 75-35-4               | 0.5                        | 0.5        | <0.5                  |
| cis-1,2-Dichloroethene    | 156-59-2              | 0.5                        | 0.5        | <0.5                  |
| trans-1,2-Dichloroethene  | 156-60-5              | 0.5                        | 0.5        | <0.5                  |
| 1,2-Dichloropropane       | 78-87-5               | 0.5                        | 0.5        | <0.5                  |
| cis-1,3-Dichloropropene   | 10061-01-5            | 0.5                        | 0.5        | <0.5                  |
| trans-1,3-Dichloropropene | 10061-02-6            | 0.5                        | 0.5        | <0.5                  |
| Ethylbenzene              | 100-41-4              | 0.5                        | 0.5        | <0.5                  |
| 2-Hexanone                | 591-78-6              | 1.0                        | 1.0        | <1.0                  |
| Methylene chloride        | 75-09-2               | 2.5                        | 2.5        | <2.5                  |
| -Methyl-2-pentanone       | 108-10-1              | 1.0                        | 1.0        | <1.0                  |
| Styrene                   | 100-42-5              | 0.5                        | 0.5        | <0.5                  |
| ,1,2,2-Tetrachloroethane  | 79-34-5               | 0.5                        | 0.5        | <0.5                  |
| Tetrachloroethene         | 127-18-4              | 0.5                        | 0.5        | <0.5                  |
| Toluene                   | 108-88-3              | 0.5                        | 0.5        | <0.5                  |
| 1,1,1-Trichloroethane     | 71-55-6               | 0.5                        | 0.5        | <0.5                  |
| ,1,2-Trichloroethane      | 79-00-5               | 0.5                        | 0.5        | <0.5                  |
| Trichloroethene           | 79-01-6               | 0.5                        | 0.5        | 0.7                   |
| Trichlorofluoromethane    | 75-69-4               | 0.5                        | 0.5        | <0.5                  |
| /vinyl acetate            | 108-05-4              | 1.0                        | 1.0        | <1.0                  |
| /vinyl chloride           | 75-01-4               | 0.5                        | 0.5        | <0.5                  |
| Total Xylenes             | 1330-20-7             | 0.5                        | 0.5        | <0.5                  |

**SURROGATE RECOVERY%**

**Dibromofluoromethane**

95

**Toluene-d8**

90

**4-Bromofluorobenzene**

93

**Erler & Kalinowski, Inc.**  
 ATTN: Mr. Brian Auchard  
 3250 Ocean Park Blvd. Suite 385  
 Santa Monica, CA 90405

**Client Project ID: Webb**  
**Client Project #: 991103.01**

**SAMPLE DESCRIPTION (Water)**

|                  |          |          |          |          |
|------------------|----------|----------|----------|----------|
| <b>Sampled:</b>  | ---      | 03/08/01 | 03/08/01 | 03/08/01 |
| <b>Received:</b> | ---      | 03/08/01 | 03/08/01 | 03/08/01 |
| <b>Reported:</b> | 03/15/01 | 03/15/01 | 03/15/01 | 03/15/01 |

**Laboratory Reference #: EKI 12211**

|                           |     |          |          |          |
|---------------------------|-----|----------|----------|----------|
| <b>Lab Sample I.D.</b>    | MB  | 01030150 | 01030151 | 01030152 |
| <b>Client Sample I.D.</b> | --- | MW-1     | MW-2     | MW-2 Dup |

**CCR METALS**

| ANALYTE          | DATE TESTED | EPA METHOD | DETECTION LIMIT<br>mg/l | SAMPLE RESULTS |        |        |        |
|------------------|-------------|------------|-------------------------|----------------|--------|--------|--------|
|                  |             |            |                         | mg/l           | mg/l   | mg/l   | mg/l   |
| Antimony         | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | <0.1   | <0.1   |
| Arsenic          | 03/14/01    | 200.7      | 0.1                     | <0.1           | 0.24   | <0.1   | <0.1   |
| Barium           | 03/14/01    | 200.7      | 0.01                    | <0.01          | 0.13   | 0.019  | 0.019  |
| Beryllium        | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Cadmium          | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Chromium (VI)    | 03/09/01    | 218.4      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Chromium (Total) | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Cobalt           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Copper           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Lead             | 03/14/01    | 200.7      | 0.05                    | <0.05          | <0.05  | <0.05  | <0.05  |
| Mercury          | 03/12/01    | 245.1      | 0.001                   | <0.001         | <0.001 | <0.001 | <0.001 |
| Molybdenum       | 03/14/01    | 200.7      | 0.05                    | <0.05          | 0.47   | 1.1    | 1.1    |
| Nickel           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Selenium         | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | <0.1   | <0.1   |
| Silver           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Thallium         | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | <0.1   | <0.1   |
| Vanadium         | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Zinc             | 03/14/01    | 200.7      | 0.01                    | <0.01          | 0.016  | 0.015  | 0.014  |

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 3250 Ocean Park Blvd. Suite 385  
 Santa Monica, CA 90405

**Client Project ID: Webb**  
**Client Project #: 991103.01**

**SAMPLE DESCRIPTION (Water)**

**Laboratory Reference #: EKI 12211**

|                  |          |          |          |          |
|------------------|----------|----------|----------|----------|
| <b>Sampled:</b>  | 03/08/01 | 03/08/01 | 03/08/01 | 03/08/01 |
| <b>Received:</b> | 03/08/01 | 03/08/01 | 03/08/01 | 03/08/01 |
| <b>Reported:</b> | 03/15/01 | 03/15/01 | 03/15/01 | 03/15/01 |

|                           |          |          |          |               |
|---------------------------|----------|----------|----------|---------------|
| <b>Lab Sample I.D.</b>    | 01030153 | 01030154 | 01030155 | 01030157      |
| <b>Client Sample I.D.</b> | MW-3     | MW-4     | MW-5     | Rinsate Water |

**CCR METALS**

| ANALYTE          | DATE TESTED | EPA METHOD | DETECTION LIMIT<br>mg/l | SAMPLE RESULTS |        |        |        |
|------------------|-------------|------------|-------------------------|----------------|--------|--------|--------|
|                  |             |            |                         | mg/l           | mg/l   | mg/l   | mg/l   |
| Antimony         | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | <0.1   | <0.1   |
| Arsenic          | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | 0.15   | <0.1   |
| Barium           | 03/14/01    | 200.7      | 0.01                    | 0.15           | 0.027  | 0.15   | 0.090  |
| Beryllium        | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Cadmium          | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Chromium (VI)    | 03/09/01    | 218.4      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Chromium (Total) | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Cobalt           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Copper           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Lead             | 03/14/01    | 200.7      | 0.05                    | <0.05          | <0.05  | <0.05  | <0.05  |
| Mercury          | 03/12/01    | 245.1      | 0.001                   | <0.001         | <0.001 | <0.001 | <0.001 |
| Molybdenum       | 03/14/01    | 200.7      | 0.05                    | 0.71           | <0.05  | 0.84   | <0.05  |
| Nickel           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Selenium         | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | <0.1   | <0.1   |
| Silver           | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Thallium         | 03/14/01    | 200.7      | 0.1                     | <0.1           | <0.1   | <0.1   | <0.1   |
| Vanadium         | 03/14/01    | 200.7      | 0.01                    | <0.01          | <0.01  | <0.01  | <0.01  |
| Zinc             | 03/14/01    | 200.7      | 0.01                    | 0.012          | 0.025  | 0.014  | 0.059  |

## 8260 QA / QC REPORT

Reporting Unit : µg/l

### 1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Date Performed : 03/13/01

LAB Sample I. D. : A01030048

Laboratory Reference: EKI 12211

| Analyte            | R1  | SP<br>CONC | MS | MSD | %MS | %MSD | RPD | ACP<br>%MS | ACP<br>RPD |
|--------------------|-----|------------|----|-----|-----|------|-----|------------|------------|
| 1,1-Dichloroethene | 0   | 20         | 21 | 21  | 105 | 105  | 0   | 61-145     | 14         |
| Benzene            | 0.0 | 20         | 21 | 20  | 105 | 100  | 5   | 76-127     | 11         |
| Trichloroethene    | 8.2 | 20         | 27 | 27  | 94  | 94   | 0   | 71-120     | 14         |
| Toluene            | 0.0 | 20         | 21 | 21  | 105 | 105  | 0   | 76-125     | 13         |
| Chlorobenzene      | 0.0 | 20         | 22 | 22  | 110 | 110  | 0   | 75-130     | 13         |

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration ( $\leq 5 \times \text{PQL}$ ); PQL = Practical Quantitation Limit.

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS:  $\{(MS-R1)/SP\} \times 100$ .

%MSD = Percent Recovery of MSD:  $\{(MSD-R1)/SP\} \times 100$ .

RPD = Relative Percent Difference:  $\{(MS - MSD)/(MS + MSD)\} \times 100 \times 2$

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

### 2. Laboratory Quality Control check sample

Date Performed : 03/14/01

LAB Sample I. D. : 8583,84,85,86,87,88

| ANALYTE                  | SPK CONC | RESULTS | %RECOVERY | ACP %   |
|--------------------------|----------|---------|-----------|---------|
| trans-1,2-Dichloroethene | 50       | 52      | 104       | 80 -120 |
| 1,1,1-Trichloroethane    | 50       | 50      | 100       | 80 -120 |
| 1,2-Dichloroethane       | 50       | 49      | 98        | 80 -120 |
| Tetrachloroethene        | 50       | 49      | 98        | 80 -120 |
| Styrene                  | 50       | 49      | 98        | 80 -120 |

ANALYST: NAHID AMERI

DATE: 03/14/01

**QA / QC REPORT**  
Reporting Unit : mg/l

**1. Matrix Spike (MS) / Matrix Spike Duplicate (MSD)**

LAB Sample I.D. : 01030151, M01030023 (CrVI), 01030151 (Hg)

| Analyte     | DATE ANALYZED | R1    | SP    | MS      | MSD    | %MS | %MSD | RPD | ACP %MS | ACP RPD |
|-------------|---------------|-------|-------|---------|--------|-----|------|-----|---------|---------|
| Antimony    | 03/14/01      | 0.0   | 1.0   | 1.02    | 1.06   | 102 | 106  | 4   | 80-120  | 15      |
| Arsenic     | 03/14/01      | 0.0   | 1.0   | 1.15    | 1.18   | 115 | 118  | 3   | 80-120  | 15      |
| Barium      | 03/14/01      | 0.019 | 0.10  | 0.119   | 0.120  | 100 | 101  | 1   | 80-120  | 15      |
| Beryllium   | 03/14/01      | 0.0   | 0.10  | 0.0998  | 0.101  | 100 | 101  | 1   | 80-120  | 15      |
| Cadmium     | 03/14/01      | 0.0   | 0.10  | 0.103   | 0.103  | 103 | 103  | 0   | 80-120  | 15      |
| Chromium    | 03/14/01      | 0.0   | 0.10  | 0.0934  | 0.0928 | 93  | 93   | 1   | 80-120  | 15      |
| Chromium VI | 03/09/01      | 0.0   | 0.10  | 0.0964  | 0.0976 | 96  | 98   | 1   | 80-120  | 15      |
| Cobalt      | 03/14/01      | 0.0   | 0.10  | 0.0924  | 0.0935 | 92  | 94   | 1   | 80-120  | 15      |
| Copper      | 03/14/01      | 0.0   | 0.10  | 0.111   | 0.110  | 111 | 110  | 1   | 80-120  | 15      |
| Lead        | 03/14/01      | 0.0   | 1.0   | 0.944   | 0.970  | 94  | 97   | 3   | 80-120  | 15      |
| Mercury     | 03/12/01      | 0.0   | 0.010 | 0.00990 | 0.0103 | 99  | 103  | 4   | 80-120  | 15      |
| Molybdenum  | 03/14/01      | 1.1   | 1.0   | 2.12    | 2.13   | 102 | 103  | 0   | 80-119  | 15      |
| Nickel      | 03/14/01      | 0.0   | 0.50  | 0.430   | 0.433  | 86  | 87   | 1   | 80-120  | 15      |
| Selenium    | 03/14/01      | 0.0   | 1.0   | 1.04    | 1.07   | 104 | 107  | 3   | 80-120  | 15      |
| Silver      | 03/14/01      | 0.0   | 1.0   | 0.997   | 1.00   | 100 | 100  | 0   | 80-120  | 15      |
| Thallium    | 03/14/01      | 0.0   | 1.0   | 0.901   | 0.930  | 90  | 93   | 3   | 80-120  | 15      |
| Vanadium    | 03/14/01      | 0.0   | 0.50  | 0.503   | 0.508  | 101 | 102  | 1   | 80-120  | 15      |
| Zinc        | 03/14/01      | 0.015 | 0.10  | 0.111   | 0.111  | 96  | 96   | 0   | 80-120  | 15      |

R1 = Result of Laboratory Sample I.D.

SPK CONC = Spiking Concentration ( <5 X PQL ) ; PQL = Practical Quantitation Limit.

MS = Matrix Spike Result

MSD = Matrix Spike Duplicate Result

%MS = Percent Recovery of MS:  $\{(MS-R1)/SP\} \times 100$ .

%MSD = Percent Recovery of MSD:  $\{(MSD-R1)/SP\} \times 100$ .

RPD = Relative Percent Difference:  $\{(MS - MSD)/(MS + MSD)\} \times 100 \times 2$

ACP%MS(MSD) = Acceptable Range of Percent.

ACP RPD = Acceptable Relative Percent Difference

ANALYST: Chris Tisserat

DATE: 03/14/01

## 2. Laboratory Quality Control check sample

LAB Sample I.D.: 01030152, M01030023 (CrVI), 01030151 (Hg)

| ANALYTE     | Date Analyzed | SPK CONC | RESULTS | %RECOVERY | ACP %    |
|-------------|---------------|----------|---------|-----------|----------|
| Antimony    | 03/14/01      | 0.50     | 0.46    | 92        | 80 - 120 |
| Arsenic     | 03/14/01      | 0.50     | 0.48    | 96        | 80 - 120 |
| Barium      | 03/14/01      | 0.50     | 0.48    | 96        | 80 - 120 |
| Beryllium   | 03/14/01      | 0.50     | 0.49    | 98        | 80 - 120 |
| Cadmium     | 03/14/01      | 0.50     | 0.49    | 98        | 80 - 120 |
| Chromium    | 03/14/01      | 0.50     | 0.49    | 98        | 80 - 120 |
| Chromium VI | 03/09/01      | 0.35     | 0.33    | 94        | 80 - 120 |
| Cobalt      | 03/14/01      | 0.50     | 0.51    | 102       | 80 - 120 |
| Copper      | 03/14/01      | 0.50     | 0.48    | 96        | 80 - 120 |
| Lead        | 03/14/01      | 0.50     | 0.47    | 94        | 80 - 120 |
| Mercury     | 03/12/01      | 0.0050   | 0.0047  | 94        | 80 - 120 |
| Molybdenum  | 03/14/01      | 0.50     | 0.48    | 96        | 80 - 120 |
| Nickel      | 03/14/01      | 0.50     | 0.46    | 92        | 80 - 120 |
| Selenium    | 03/14/01      | 0.50     | 0.47    | 94        | 80 - 120 |
| Silver      | 03/14/01      | 0.50     | 0.47    | 94        | 80 - 120 |
| Thallium    | 03/14/01      | 0.50     | 0.47    | 94        | 80 - 120 |
| Vanadium    | 03/14/01      | 0.50     | 0.48    | 96        | 80 - 120 |
| Zinc        | 03/14/01      | 0.50     | 0.49    | 98        | 80 - 120 |

ANALYST: Chris Tisserat

DATE: 03/14/01

**Erler & Kalinowski, Inc.**

ATTN: Mr. Brian Auchard

3250 Ocean Park Blvd. Suite 385

Santa Monica, CA 90405

**Client Project ID:** Webb

**Client Project #:** 991103.01

**Sample Description:** Soil,

**Laboratory Reference #:** EKI 12211

**Sampled:** 03/08/01

**Received:** 03/08/01

**Analyzed:** 03/20/01

**Reported:** 03/22/01

**TOTAL ARSENIC (EPA 206.2)**

| <b>LABORATORY<br/>SAMPLE<br/>NUMBER</b> | <b>CLIENT<br/>SAMPLE<br/>NUMBER</b> | <b>SAMPLE<br/>RESULTS<br/>µg/l</b> |
|---|-------------------------------------|------------------------------------|
| 01030150                                | MW-1                                | 320                                |
| 01030151                                | MW-2                                | 6.6                                |
| 01030152                                | MW-2 Duplicate                      | 5.6                                |
| 01030153                                | MW-3                                | 80                                 |
| 01030154                                | MW-4                                | 7.9                                |
| 01030155                                | MW-5                                | 190                                |
| 01030157                                | Rinsate Water                       | 4.4                                |

|                        |            |
|------------------------|------------|
| <b>Detection Limit</b> | <b>1.0</b> |
|------------------------|------------|

Analyte reported as N.D. were not present above the stated limit of detection.



## QC DATA REPORT

Analysis : Arsenic (EPA 206.2)

Date of Analysis : 03/20/01

Laboratory Sample No : 01030157

Laboratory Reference No : EKI 12211

| Analyte | R1<br>(ppb) | SP<br>(ppb) | MS<br>(ppb) | MSD<br>(ppb) | PR1<br>% | PR2<br>% | RPD<br>% |
|---------|-------------|-------------|-------------|--------------|----------|----------|----------|
| Arsenic | 2.2         | 5.0         | 6.88        | 7.28         | 93.6     | 102      | 6        |

### Definition of Terms :

|     |  |
|-----|--|
| R1  | Results Of First Analysis  |
| SP  | Spike Concentration Added to Sample  |
| MS  | Matrix Spike Results   |
| MSD | Matrix Spike Duplicate Results   |
| PR1 | Percent Recovery Of MS: $\{(MS-R1) / SP\} \times 100$                      |
| PR2 | Percent Recovery Of MSD: $\{(MSD-R1) / SP\} \times 100$                    |
| RPD | Relative Percent Difference: $\{(MS-MSD) / (MS+MSD)\} \times 100 \times 2$ |

(480) 736-0960 Fax (480) 736-0970

Lab Job No: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_

REDACTED

| CUSTOMER INFORMATION  |   |                   | PROJECT INFORMATION                   |               |                |  |   |  |  |  |  | REMARKS/PRECAUTIONS |  |
|-----------------------|---|-------------------|---------------------------------------|---------------|----------------|--|---|--|--|--|--|---------------------|--|
| COMPANY:              | Erler + Kalinowski, Inc.                                    |                   | PROJECT NAME:                         | Webb          |                | <div style="writing-mode: vertical-rl; transform: rotate(180deg);">             ANALYST REQUEST<br/>             0968<br/>             HOLD           </div> |   |  |  |  |  |                     |  |
| SEND REPORT TO:       | Brian Avchard   | NUMBER:           | 991103.01                             |               |                |  |   |  |  |  |  |                     |  |
| ADDRESS:              | 3250 Ocean Park Blvd.<br>Suite 384<br>Santa Monica CA 90405 | LOCATION:         | 5030 Firestone Blvd.<br>South Gate CA |               |                |  |   |  |  |  |  |                     |  |
| PHONE:                | 310-384-8855 FAX: 310-314-9966                              | SAMPLED BY:       |                                       |               |                |  |   |  |  |  |  |                     |  |
| SAMPLE ID             | NO. OF CONTAINERS   | SAMPLE DATE       | SAMPLE TIME                           | SAMPLE MATRIX | CONTAINER TYPE | PRES.  |   |  |  |  |  |                     |  |
| MW-1                  | 2   | 3/8/01            | 1520                                  | W             | VOA HCL        | X  |   |  |  |  |  |                     | <u>2 week turnaround</u>   |
| MW-2                  | 2   | 3/8/01            | 1220                                  |               |                | X  |   |  |  |  |  |                     |  |
| MW-2 duplicate        | 2   | 3/8/01            | 1215                                  |               |                | X  |   |  |  |  |  |                     |  |
| MW-3                  | 2   | 3/8/01            | 1315                                  |               |                | X  |   |  |  |  |  |                     |  |
| MW-4                  | 2   | 3/8/01            | 1005                                  |               |                | X  |   |  |  |  |  |                     |  |
| MW-5                  | 2   | 3/8/01            | 1420                                  |               |                | X  |   |  |  |  |  |                     |  |
| <del>XXXXXX</del>     | <del>2</del>  | <del>3/8/01</del> | <del>XXXX</del>                       |               |                |  |   |  |  |  |  |                     |  |
| Rinse blank           | 2   | 3/8/01            | 1325                                  |               |                | X  |   |  |  |  |  |                     |  |
| Rinse water           | 2   | 3/8/01            | 1335                                  |               |                | X  | X |  |  |  |  |                     | Hold - run for B260 if any detections in rinseate blank (call EKI blank) |
|                       |   |                   |                                       |               |                |  |   |  |  |  |  |                     |  |
|                       |   |                   |                                       |               |                |  |   |  |  |  |  |                     |  |
|                       |   |                   |                                       |               |                |  |   |  |  |  |  |                     |  |
|                       |   |                   |                                       |               |                |  |   |  |  |  |  |                     |  |
| Total No. of Samples: | 16  |                   | Method of Shipment: delivered full    |               |                |  |   |  |  |  |  |                     |  |
| Relinquished By:      | Date/Time:  | 3/8/01 16:05      | Received By:                          | Date/Time:    | 3/8/01 16:05   | Reporting Format: (check)<br>NORMAL X S.D. HMMD _____<br>RWQCB _____ OTHER _____   |   |  |  |  |  |                     |  |
| Relinquished By:      | Date/Time:  | 3/8/01 1746       | Received By:                          | Date/Time:    |                |  |   |  |  |  |  |                     |  |
| Relinquished By:      | Date/Time:  |                   | Received For Lab By:                  | Date/Time:    | 5:52 pm 3/8/01 | Sample Integrity: (check)<br>intact _____ on ice _____   |   |  |  |  |  |                     |  |

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

Lab Job No: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_



3002 Dow, Suite 532  
Tustin, CA 92780  
(714) 832-0064, Fax (714) 832-0067

4620 E. Elwood, Suite 4  
Phoenix, AZ 85040  
(480) 736-0960 Fax (480) 736-0970

REQUIRED TAT: Nema

| CUSTOMER INFORMATION                                    |                   |             | PROJECT INFORMATION                 |               |                | ANALYSIS METHOD REQUEST |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|-------------------|-------------|-------------------------------------|---------------|----------------|-------------------------|-------------------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| COMPANY: <b>ERLER + KALINOWSKI, INC.</b>                |                   |             | PROJECT NAME: <b>WEGA</b>           |               |                |                         |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SEND REPORT TO: <b>BRIAN AUCHARD</b>                    |                   |             | NUMBER: <b>991103.01</b>            |               |                |                         |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ADDRESS: <b>3250 OCEAN PARK BLVD</b>                    |                   |             | LOCATION: <b>SOUTH GATE, CA</b>     |               |                |                         |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SUITE <b>385</b>  |                   |             | ADDRESS: <b>5030 FIRESTONE BLVD</b> |               |                |                         |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SANTA MONICA, CA <b>90405</b>                           |                   |             | SOUTH GATE, CA                      |               |                |                         |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PHONE: <b>(310) 314-8855</b> FAX: <b>(310) 314-8860</b> |                   |             | SAMPLED BY: <b>[Signature]</b>      |               |                |                         |                         |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SAMPLE ID   | NO. OF CONTAINERS | SAMPLE DATE | SAMPLE TIME                         | SAMPLE MATRIX | CONTAINER TYPE | PREP                    | ANALYSIS METHOD REQUEST |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MW-1  | 1                 | 3/8/01      | 15:45                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MW-2  | 1                 | 3/8/01      | 11:35                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MW-2 - Dup  | 1                 | 3/8/01      | 12:01                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MW-3  | 1                 | 3/8/01      | 13:19                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MW-4  | 1                 | 3/8/01      | 10:08                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| MW-5  | 1                 | 3/8/01      | 14:30                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rin sate Water  | 1                 | 3/8/01      | 13:38                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 9:39                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 9:10                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 6:47                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 7:02                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 3:48                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 15:1                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 11:04                               | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 4:0                                 | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|   |                   |             | 9:58                                | W             | Plastic        | HMMD                    | X                       | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Total No. of Samples: **7**

Relinquished By: **[Signature]** Date/Time: **3/8/01 16:05**

Relinquished By: **[Signature]** Date/Time: **3/8/01 17:46**

Relinquished By: **[Signature]** Date/Time: **3/8/01 5:50am**

Method of Shipment: **Delivered**

Received By: **[Signature]** Date/Time: **3/8/01 16:05**

Received By: **[Signature]** Date/Time: **17:46**

Received For/Lab By: **[Signature]** Date/Time: **3/8/01**

Reporting Format: (check)

NORMAL ☒ S.D. HMMD ☐

RWQCB ☐ OTHER ☐

Sample Integrity: (check)

intact ☐ on ice ☐

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pickup samples.

## Erler & Kalinowski, Inc.

Consulting Engineers and Scientists

3250 Ocean Park Blvd., Suite 385  
Santa Monica, CA 90405  
www.ekiconsult.com  
Tel. (310) 314-8555  
Fax (310) 314-8860

1 May 2001

Mr. Michael Farley, Esq.  
Jervis B. Webb Company  
34375 West Twelve Mile Road  
Farmington Hills, Michigan 48331

Subject: Quarterly Progress Report for January through March 2001  
For the Jervis B. Webb Company of California Property,  
5030 Firestone Boulevard, South Gate, California  
(RWQCB SLIC File No. 744; EKI 991103.01)

Dear Mr. Farley:

Erler & Kalinowski, Inc. is pleased to present the enclosed *Quarterly Progress Report for January through March 2001*, dated 30 April 2001. This report describes the activities completed during the period from January through March 2000 at the Jervis B. Webb Company of California property located at 5030 Firestone Boulevard in South Gate, California.

Please contact us if you have any comments or questions.

Very truly yours,

ERLER & KALINOWSKI, INC.



Steven R. Chambers, Ph.D.  
Project Manager



Steven G. Miller, P.E.  
Supervising Engineer

cc: Mr. Michael Feeley